Columbia University Bulletin

The Faculty of Medicine
College of Physicians & Surgeons
1986–1987

Serial
B
Spec-6011
Ref-6011

Inquiries

POST OFFICE ADDRESS
College of Physicians and Surgeons
Columbia University
630 West 168th Street
New York, N.Y. 10032

TELEPHONE INQUIRIES:
Office of Admissions: (Area code 212) 305-3595
Office of Financial Aid: (Area code 212) 305-4100

OTHER BULLETINS OF THE FACULTY OF THE MEDICINE:
Human Nutrition
Nursing (including the Graduate Programs: Acute Care/Adult, Adult Primary Care, Community Nursing, Gerontology, Maternity Nursing–Nurse-Midwifery, Nurse Anesthesia, Oncology Nursing, Pediatric Primary Care Nursing, Pediatric Specialty Care Nursing, Perinatal Nursing, Adult/Child Psychiatric–Community Mental Health Nursing
Physical Therapy and Occupational Therapy
Center for Psychoanalytic Training and Research
Public Health

Columbia University Bulletin

The Faculty of Medicine
College of Physicians & Surgeons
1986–1987

Contents

Academic Calendar 5

Health Sciences Administration 8

Faculty of Medicine 8

College of Physicians and Surgeons and Affiliated Hospitals 17

Admission, Registration, Expenses, and Financial Aid 26
Application for Admission, 26. Registration, 27. Regulations, 27. Auditing Courses, 28. Fees, 28. Application or Renewal of Application for a Degree, 30. Requests for Transcripts, 30. Estimated Expenses, 31. Housing, 31. Financial Aid, 32. Student and Alumni Activities, 43.

The Program of Instruction 47
Grades, Promotions, and Leaves of Absence, 47. Key to Course Numbers, 48. Summary of Curriculum, 48. Basic Science and Introductory Clinical Courses, 48. Major Clinical Year, 50. Fourth Year, 52. Special Programs, 52. Endowed Lectureships and Visiting Professorship, 55. Prizes and Awards, 55.

Postgraduate Programs 57

Departments of Instruction 59
Anatomy and Cell Biology, 59. Anesthesiology, 60. Biochemistry and Molecular Biophysics, 64. Dermatology, 65. Genetics and Development, 67. Medicine, 68. Microbiology, 81. Neurological Surgery, 82. Neurology, 84. Obstetrics and Gynecology, 87. Ophthalmology, 91. Orthopedic Surgery, 94. Otolaryngology, 96. Pathology, 98. Pediatrics, 103. Pharmacology, 111. Physiology and Cellular Biophysics, 112. Psychiatry, 113. Public Health, 126. Radiation Oncology, 135. Radiology, 136. Rehabilitation Medicine, 140. Surgery, 143. Urology, 148.

Student Rosters: Classes of 1987–1990 152

Academic Calendar, 1986–1987

Major Religious Holidays

For a statement of University policy regarding religious holidays, see *Admission, Registration, Expenses, and Financial Aid*—Regulations.

Some of the major holidays occurring on weekdays are listed below. The Jewish holy days begin at sundown of the preceding day.

Saturday, Sunday, October 4, 5	Rosh Hashanah
Monday, October 13	Yom Kippur
Saturday, Sunday, October 18, 19	First days of Succoth
Sunday, October 26	Last day of Succoth
Thursday, December 25	Christmas
Tuesday, Wednesday, April 14, 15	First days of Passover
Friday, April 17	Good Friday
Sunday, April 19	Easter
Monday, Tuesday, April 20, 21	Last days of Passover
Wednesday, Thursday, June 3, 4	Shavuoth

JUNE

9-13 Registration period for Classes of 1987 and 1988.

12 Academic year begins for Class of 1988.

10-11 NBME 1, Class of 1988. Passing required for graduation from P&S.

23 Monday. Academic year begins for Class of 1987.

JULY

1 Tuesday. Class of 1987 reports to hospital rotations.

4 **Friday. Independence Day observed for third- and fourth-year students.**

7 Monday. Class of 1988 reports to hospital rotations.

AUGUST

1 Friday. *Last day to apply or reapply for all degrees to be conferred in October (see September 4).

18-24 Monday-Sunday. Orientation for first-year students.

20 Wednesday. †Registration for first-year students.

22 Friday. †Registration for second-year students who have not yet registered by mail.

25 Monday. Academic year begins for first- and second-year students; late registration begins.

**Students who apply after this date must pay a late fee.*
†Students allowed to register after the period specified must pay a late fee.

SEPTEMBER

1 **Monday. Labor Day holiday for first-, second-, and third-year students.**

3-4 Wednesday and Thursday. National Board Part I Examination for students failing June 10-11 examination.

4 Thursday. Last day to file *late* applications for October degrees.

23-24 Wednesday–Thursday. National Board Part II examination for fourth-year students. Passing required for graduation from P&S.

OCTOBER

22 **Wednesday. Awarding of October degrees.**

31 Friday. *Last day to apply or reapply for all degrees to be conferred in January (see December 5).

NOVEMBER

4 **Tuesday. Election Day. Half-day holiday for first- and second-year students.**

27-28 **Thursday–Friday. Thanksgiving holiday for first-, second-, and third-year students.**

DECEMBER

5 Friday. Last day to file *late* applications for January degrees.

23 **Tuesday through Sunday, January 4. Vacation for first-year students.**

20 **Saturday through Sunday, January 4. Vacation for second- and third-year students.**

JANUARY

5 Monday. Resumption of classes for first-, second-, and third-year students.

5 Monday. Second semester begins for first-year students.

19 Monday. Martin Luther King's Birthday observed. Holiday for first- and second-year students.

21 **Awarding of January degrees.**

FEBRUARY

16 **Monday. Washington's Birthday. Holiday for first- and second-year students.**

16 Monday. *Last day to apply or reapply for all degrees to be conferred in May (see April 1).

MARCH

21-29 **Saturday–Sunday. Spring vacation for first- and second-year students.**

28-April 3 Saturday through Sunday. Spring vacation for first-year students.

30 Monday. Last day to file *late* applications for May degrees.

APRIL

7-8 Tuesday and Wednesday. National Board Part II for students failing September 23-24 examination.

**Students who apply after this date must pay a late fee.*

MAY

6 Wednesday. Dean's Day for Medical Student Research.

13 Wednesday. Columbia University Commencement and Convocation of the College of Physicians and Surgeons.

25 Monday. Memorial Day holiday for first-, second-, and third-year students.

JUNE

5 Friday. Year ends for second-year students.

12 Friday. Second semester ends for first-year students.

8-12 Registration for Classes of 1988 and 1989.

9-10 Tuesday and Wednesday. National Board Part I Examination. Passing required for graduation from P&S.

12 Academic year begins for Class of 1988.

19 Friday. Major Clinical Year concludes for third-year students.

JULY

1 Wednesday. Class of 1988 reports to hospital rotations.

4 Saturday. Independence Day holiday.

6 Monday. Hospital rotations begin for Class of 1989.

Dates of National Board Examinations

Part I	September 3–4, 1986. Not given at P&S. June 9–10, 1987. Required by P&S.
Part II	September 23–24, 1986. Required at P&S. April 7–8, 1986. Not given at P&S.

Health Sciences Administration

MICHAEL I. SOVERN, LL.B., LL.D. *President of the University*

ROBERT F. GOLDBERGER, M.D. *Provost of the University*

HENRIK H. BENDIXEN, M.D. *Vice President for Health Sciences*

KATHLEEN MULLINEX, Ph.D. *Vice Provost of the University*

DONALD F. TAPLEY, M.D. *Senior Deputy Vice President for Health Sciences*

ROBERT I. LEVY, M.D. *Senior Associate Vice President for Health Sciences*

JOAN LEIMAN, Ph.D. *Deputy Vice President for Health Sciences*

KATHLEEN O'DONNELL, M.B.A., M.P.H. *Assistant Vice President for Administration*

LOUIS SAKSEN *Assistant Vice President for Facilities Management*

The Faculty of Medicine

HENRIK H. BENDIXEN, M.D. *Dean of the Faculty of Medicine*

DONALD S. KORNFELD, M.D. *Associate Dean*

KATHLEEN O'DONNELL, M.B.A., M.P.H. *Associate Dean for Administration*

RAYMOND J. DEVLIN, M.S. *Associate Dean for Administration*

LINDA D. LEWIS, M.D. *Associate Dean for Student Affairs*

EDWARD B. HEALTON, M.D. *Acting Associate Dean*

SEYMOUR LIEBERMAN, Ph.D. *Acting Associate Dean*

DOROTHY ESTES, M.D. *Assistant Dean for Alumni Affairs*

ELIZABETH GERST, Ph.D. *Assistant Dean for Continuing Medical Education*

MARY MUNDINGER, M.A., Dr.P.H. *Dean of the School of Nursing*

ANNE BELCHER, Ph.D. *Associate Dean for Academic Affairs, Nursing*

SALLY SOLOMON, M.S. *Assistant Dean for Student Affairs, Nursing*

ALLAN ROSENFIELD, M.D. *Dean of the School of Public Health*

STEPHEN WOTMAN, D.D.S. *Associate Dean for Public Health and Dentistry*

CHERYL HEALTON, M.P.A. *Associate Dean for Program Development, Public Health*

MICHAEL O'CONNOR, M.P.A. *Assistant Dean for Administration, School of Public Health*

ZENA STEIN, M.B., B.Ch. *Associate Dean for Academic and Research Activities, Public Health*

WILLIAM A. VAN WIE, Dr.P.H. *Associate Dean for Student Affairs, Public Health*

Executive Committee of the Faculty Council

Henrik H. Bendixen (*chairman*)
Robert Bertsch
Penelope Boyden
Charles Cantor
Harold Dick
Bernard Erlanger
Dorothy Estes
Peter Green
Leonard Harber
Barry Honig
Jennifer Kelsey
Rima Kopelman
Peter Puchner

Faculty Council of the Faculty of Medicine

University Administration

Michael I. Sovern
Robert F. Goldberger
Henrik H. Bendixen
Donald F. Tapley
Robert I. Levy
Rachael K. Anderson

Anatomy/Cell Biology

Michael Gershon
Ernest April
John Pintar
Taube Rothman

Anesthesiology

Edward Miller
Stephanie M. Duberman
Mieczyslaw Finster
Eugene Ornstein
Richard Raker
Peter T. Rothstein
Victor M. Zayas

Biochemistry

Isidore S. Edelman
Stephen P. Goff
Barry Honig
Lee Makowski

Dermatology

Leonard C. Harber
Vincent A. DeLeo
Saul Sanders

Genetics and Development

Charles R. Cantor
Jurgen Brosius
John D. Rainer
Debra Wolgemuth

Medicine

Robert M. Glickman
Conrad Blum
Randolph P. Cole
Yale Enson
Dorothy Estes
Michael Field
Peter Green
Henry Greenberg
Rima Kopelman
John N. Loeb
Daniel Macken
Robert Taub

Microbiology

Lucille Shapiro
David Figurski
Alexander Goldfarb
Sherri Morrison

Neurological Surgery

Bennett Stein
Kalmon Post
Robert Solomon

Neurology

Lewis P. Rowland
Robert Burke
Darryl C. DeVivo
Salvatore DiMauro
Richard Mayeux
Timothy A. Pedley

Nursing

Mary Mundinger

Obstetrics and Gynecology

Mortimer Rosen
Laxmi Baxi
Machelle Harris
Ralph Jewelewicz
Duane Todd
Wolfgang Tretter

Ophthalmology

Charles J. Campbell
Francis L'Esperance
B. Dobli Srinivasan
Basil Worgul

Orthopedic Surgery

Harold Dick
S. Ashby Grantham
Stephen J. McIlveen

Otolaryngology

Maxwell Abramson
Chen Chung Huang
Barry Shapiro

Pathology

John Fenoglio
Richard Defendini
Lester Geller
Arthur Hays
Charles Marboe
Richardo Mesa-Tejada
Kathleen O'Toole

Pediatrics

Michael Katz
Kuane Anyane-Yeboa
Margaret Heagarty
William Heird
Akira Morishima
Sharon Oberfield
Joan Regan
Raymond Stark
Elizabeth Watkins

Pharmacology

Brian F. Hoffman
Penelope Boyden
Norman Kahn
Wilbur H. Sawyer

Physiology

Samuel C. Silverstein
Jorge Fischbarg
Herbert Lipowsky
Mero Nocenti

Psychiatry

Herbert Pardes
Bruce Dohrenwend
Jean Endicott
Frederick Kass
Clarice Kestenbaum
Emily Mumford
John Oldham
Ethel Person
Ronald Rieder
Steven Roose
Hadassah Tamir

Public Health

Allan Rosenfield
Trudy Bush
Suzanne Holmes-Giannini
Martin Gorosh
Eugene Litwak
Zena Stein
Sylvan Wallenstein

Radiation Oncology

James D. Cox
Eric J. Hall
Karen S. Fountain

Radiology

David H. Baker
John Amodio
John Austin
Jacqueline Bello
Rashid Fawwaz
Frieda Feldman
John Silver

Rehabilitation Medicine

John A. Downey
Patricia A. Miller
Stanley J. Myers

Surgery

Keith Reemtsma
R. Peter Altman
Alison Estabrook
Thomas C. King
Henry Spotnitz
George Todd

Urology

Carl Olsson
Mitchell Benson
Peter Puchner

Harlem Hospital Center

Charles Windsor
James L. Curtis
Jeanne A. Smith

Helen Hayes Hospital

Bernard Rose
Gary Abrams
Jack Tohme

Mary Imogene Bassett Hospital

William Streck
Roger W. MacMillan
David S. Svahn

Morristown Memorial Hospital

Donald Bradley
Abraham Risk
Stephen Wang

Overlook Hospital

Thomas Foley
H. William Diefendorf
Warren Nestler

The Presbyterian Hospital

Thomas Q. Morris
Arthur Cotliar
Soly Baredes

St. Luke's–Roosevelt Hospital Center

Gary Gambuti
F. Xavier Pi-Sunyer
Harvey J. Weiss

Chairmen's Advisory Committee to the Dean

Henrik H. Bendixen, *Chairman*
Maxwell Abramson
Rachael Anderson
David Baker
John Benson
Michael Bernstein
Patricia Boyd
Charles Campbell
Robert Canfield
Charles Cantor
Patricia Cassavaugh
James Cox
Raymond Devlin
Harold Dick
Ruth Dickinson
John Downey
Ronald Drusin
Isidore Edelman
Bernard Erlanger
Dorothy Estes
John Fenoglio
Allan Formicola
Andrew Frantz
Gary Gambuti
Michael Gershon
Elizabeth Gerst
Robert Glickman
Max Gottesman
Barry Gurland
Leonard Harber
Edward Healton
Wayne Hendrickson
Gary Herrmann
Brian Hoffman
Carolyn Huggins
Norman Kahn
Eric Kandel
Michael Katz
John Koester
Dennis Kohn
Donald Kornfeld
Joan Leiman
Robert Levy
Linda Lewis
Seymour Lieberman
Edward Miller
Thomas Morris
Mary Mundinger
Barbara Neuhaus
Kathleen O'Donnell
Carl Olsson
Herbert Pardes
Dinshaw Patel
Keith Reemtsma
Bernard Rose
Mortimer Rosen
Allan Rosenfield
David Rothman
Lewis Rowland
Mae Rudolph
Diane Rulnick
Louis Saksen
Lucille Shapiro
Samuel Silverstein
Richard Sohn
Bennett Stein
William F. Streck
Mervyn Susser
Donald F. Tapley
Stephen Wang
I. Bernard Weinstein
Isis Wilson
Myron Winick

Committees

CURRICULUM: Professor Ronald Drusin (*chairman*); Professors Ambron, April, Arkow, Bertsch, Birkhoff, Brust, Cameron, J. Fenoglio, Figurski, Fischbarg, Ghez, Graziano, Lefkowitch, Margulies, S. Myers, Ortiz-Neu, Pierson, Post, Ruby, Sanborn, Siris, D. Srinivasan, Winick. *Ex officio*: Flora Atkins, Professor Geller, Rachel Goldstein, Professors Sidney Horowitz and Linda Lewis.

ADMISSIONS: Professor Andrew Frantz (*chairman*); Professors April, Ballard, Jennifer Bell, Ann Bernstein, Bertsch, Branche, Brust, Forde, Hugo, Jewett, Kane, Abbie Knowlton, George McCormack, Nocenti, Ortiz-Neu, Quest, Wilbur Sawyer, Schullinger, Stock, Wiedel, Gail Williams.

Delegates to the University Senate

Jennifer Bell, Leonard Brand, Dickson Despommier, Welton Gersony, Allen Hyman, Thomas C. King, and Elizabeth Mahoney: *Student:* Bard Cosman.

Joint Administrative Board

REPRESENTING COLUMBIA UNIVERSITY: Henrik H. Bendixen, Edward N. Costikian, John Goelet, William N. Hubbard, Jr., Robert M. Pennoyer, Michael I. Sovern, Stanley Temko.

REPRESENTING PRESBYTERIAN HOSPITAL: Howard L. Clark, George S. Dillon, William S. Canaga, John R. Katzenbach, Ralph S. Leach, Thomas Q. Morris, Sidney J. Weinberg, Jr., Myles V. Whelan, Jr.

Health Sciences Administrative Staff

PATRICIA A. BOYD. *Executive Assistant to the Vice President*

ROBERT DEMAREST. *Director; Biomedical Communications*

GARY HERRMANN. *Director Budget Office*

ANTHONY O'TOOLE. *Director; Financial Services and Systems*

RENEE RILEY. *Assistant Director; University Residence Halls*

MAE RUDOLPH. *Director; Professional Communications*

DIANE RULNICK. *Director; Health Sciences Personnel*

RICHARD J. SOHN. *Director; Grants and Contracts*

ISIS WILSON. *Director; Planning*

Faculty of Medicine Administrative Staff

FLORA ATKINS. *Administrative Coordinator; Curricular Affairs*

JOAN BENNIS. *Director; Office of Admissions*

JOHN L. BENSON. *Business Officer*

PATRICIA CASSAVAUGH. *Manager of Academic Appointments*

FRANCES FICKLEN. *Financial Aid Officer*

FRANCES PANTAZIS *Associate director; Student Information Services*

ANKE NOLTING. *Director; Alumni Relations and Development*

ELLEN SPILKER. *Director; Student Affairs*

Officers Emeriti

HENRY ARANOW, JR. *Lambert Professor Emeritus of Medicine*

HAROLD BARKER. *Professor Emeritus of Clinical Surgery*

ANDREW L. BASSETT. *Professor Emeritus of Orthopedic Surgery*

VIOLA BERNARD. *Clinical Professor Emeritus of Psychiatry*

WILLIAM BLANC. *Professor Emeritus of Pathology*

STANLEY BRADLEY. *Bard Professor Emeritus of Medicine*

A. WHITLEY BRANWOOD. *Professor Emeritus of Clinical Pathology*

HAROLD W. BROWN. *Professor Emeritus of Parasitology*

GORDON M. BRUCE. *Professor Emeritus of Clinical Ophthalmology*

LESTER CAHN. *Professor Emeritus of Oral Pathology*

MARY E. CALLAHAN. *Professor Emeritus of Physical Therapy*

ARTHUR CARR. *Professor Emeritus of Medical Psychology*

ROBERT CARROLL. *Professor Emeritus of Clinical Orthopedic Surgery*

ERWIN CHARGAFF. *Professor Emeritus of Biochemistry*

JOHN J. CONLEY. *Professor Emeritus of Clinical Otolaryngology*

WILFRED M. COPENHAVER. *Professor Emeritus of Anatomy*

STUART COSGRIFF. *Professor Emeritus of Medicine*

ANDRE F. COURNAND. *Professor Emeritus of Medicine*

DAVID COWEN. *Professor Emeritus of Neuropathology*

GEORGE F. CRIKELAIR. *Professor Emeritus of Clinical Surgery*

EDWARD C. CURNEN, JR. *Carpentier Professor Emeritus of Pediatrics*

ROBERT C. DARLING. *Simon Baruch Professor Emeritus of Physical Medicine and Rehabilitation*

ELIZABETH B. DAVIS. *Professor Emeritus of Clinical Psychiatry*

ROBERT M. DAY. *Professor Emeritus of Clinical Ophthalmology*

FELIX DEMARTINI. *Professor Emeritus of Clinical Medicine*

D. ANTHONY D'ESOPO. *Professor Emeritus of Clinical Obstetrics and Gynecology*

ZACHARIAS DISCHE. *Professor Emeritus of Biochemistry*

HERBERT O. ELFTMAN. *Professor Emeritus of Anatomy*

CARL FEIND. *Professor Emeritus of Clinical Surgery*

M. IRENE FERRER. *Professor Emeritus of Clinical Medicine*

JOHN W. FERTIG. *Professor Emeritus of Clinical Medicine*

NATHANIEL FINBY. *Professor Emeritus of Clinical Radiology*

THOMAS D. FLEMING. *Professor Emeritus of Library Science*

CHARLES A. FLOOD. *Professor Emeritus of Clinical Medicine*

GOODWIN L. FOSTER. *Professor Emeritus of Biochemistry*

CHARLES L. FOX, JR. *Professor Emeritus of Microbiology (in Surgery)*

MARIE-LOUISE FRANCISCUS. *Professor Emeritus of Occupational Therapy*

HENRY CLAY FRICK II. *Professor Emeritus of Clinical Obstetrics and Gynecology*

ALEXANDER GARCIA. *Stinchfield Professor Emeritus of Orthopedic Surgery*

ELIZABETH S. GILL. *Professor Emeritus of Nursing*

ELI GOLDENSOHN. *Professor Emeritus of Neurology*

WILLIAM GOLDFARB. *Clinical Professor Emeritus of Psychiatry*

LEONARD J. GOLDWATER. *Professor Emeritus of Occupational Medicine*

RUTH J. GUTTMANN. *Professor Emeritus of Radiology*

CUSHMAN D. HAAGENSEN. *Professor Emeritus of Clinical Surgery*

EDGAR HANKS. *Professor Emeritus of Clinical Anesthesiology*

REJANE HARVEY. *Richards Professor Emeritus of Medicine*

MICHAEL HEIDELBERGER. *Professor Emeritus of Immunochemistry*

FREDERICK G. HOFMANN. *Professor Emeritus of Pharmacology*

GEORGE H. HUMPHREYS II. *Mott Professor Emeritus of Surgery*

HAROLD W. JACOX. *Professor Emeritus of Radiology*

A. GREGORY JAMESON. *Professor Emeritus of Clinical Medicine*

IRA S. JONES. *Clinical Professor Emeritus of Ophthalmology*

ELVIN A. KABAT. *Higgins Professor Emeritus of Microbiology*

ERICH J. KAHN. *Professor Emeritus of Pediatrics*

AARON KARUSH. *Professor Emeritus of Clinical Psychiatry*

FORREST E. KENDALL. *Professor Emeritus of Biochemistry*

PHILIP KNAPP. *Professor Emeritus of Clinical Opthalmology*

LAWRENCE C. KOLB. *Professor Emeritus of Psychiatry*

RAPHAEL LATTES. *Professor Emeritus of Surgical Pathology*

JOHN K. LATTIMER. *Professor Emeritus of Urology*

FERDINAND F. McALLISTER. *Professor Emeritus of Clinical Surgery*

WLADYSLAW MANSKI. *Professor Emeritus of Ophthalmology*

LESTER MARK. *Professor Emeritus of Anesthesiology*

RICHARD L. MASLAND. *H. Houston Merritt Professor Emeritus of Neurology*

AUBRE MAYNARD. *Professor Emeritus of Clinical Surgery*

GEORGE R. MERRIAM, JR. *Professor Emeritus of Clinical Ophthalmology*

KARL MEYER. *Professor Emeritus of Biochemistry*

LESTER A. MOUNT. *Professor Emeritus of Clinical Neurological Surgery*

MARGARET R. MURRAY. *Professor Emeritus of Anatomy*

LIONEL OVESEY. *Clinical Professor Emeritus of Psychiatry*

HELEN F. PETTIT. *Professor Emeritus of Nursing*

KERMIT PINES. *Professor Emeritus of Clinical Medicine*

CONRAD PIRANI. *Professor Emeritus of Pathology*

J. LAWRENCE POOL. *Professor Emeritus of Neurological Surgery*

HERBERT RACKOW. *Professor Emeritus of Anesthesiology*

ROBIN RANKOW. *Professor Emeritus of Clinical Otolaryngology*

LEON ROIZIN. *Professor Emeritus of Neuropathology*

HARRY M. ROSE. *Borne Professor Emeritus of Microbiology*

CHARLES T. RYDER. *Professor Emeritus of Clinical Orthopedic Surgery*

ERNEST SALANITRE. *Professor Emeritus of Clinical Anesthesiology*

THOMAS V. SANTULLI. *Professor Emeritus of Surgery*

EDWARD B. SCHLESINGER. *Byron Stookey Professor Emeritus of Neurological Surgery*

WILLIAM B. SEAMAN. *Picker Professor Emeritus of Radiology*

WILLIAM H. SEBRELL, JR. *Williams Professor Emeritus of Nutrition*

BEATRICE C. SEEGAL. *Professor Emeritus of Microbiology*

LAWRENCE W. SLOAN. *Professor Emeritus of Clinical Surgery*

HAMILTON SOUTHWORTH. *Professor Emeritus of Clinical Medicine*

WARREN M. SPERRY. *Professor Emeritus of Biochemistry*

DAVID SPRINSON. *Professor Emeritus of Biochemistry*

LEO SROLE. *Professor Emeritus of Clinical Social Sciences in Psychiatry*

FRANK E. STINCHFIELD. *Professor Emeritus of Orthopedic Surgery*

JOHN V. TAGGART. *Dalton Professor Emeritus of Physiology and Medicine*

JUERGEN TONDORFF. *Professor Emeritus of Otolaryngology*

FRANK W. VAN DYKE. *Professor Emeritus of Public Health (Administrative Medicine)*

CARMEN T. VICALE. *Professor Emeritus of Clinical Neurology*

ARTHUR B. VOORHEES. *Professor Emeritus of Clinical Surgery*

JULES G. WALTNER. *Professor Emeritus of Clinical Otolaryngology*

SHIH-CHUN WANG. *Gustavus A. Pfeiffer Professor Emeritus of Pharmacology*

JOHN J. WEBER. *Professor Emeritus of Clinical Psychiatry*

ROBERT WEISS. *Dehamar Professor and Dean Emeritus of Public Health*

SIDNEY C. WERNER. *Professor Emeritus of Clinical Medicine*

ARTHUR B. WERTHEIM. *Professor Emeritus of Medicine*

ROGER WILLIAMS. *Professor Emeritus of Public Health (Medical Entomology)*

SAMUEL M. WISHIK. *Professor Emeritus of Public Health (Public Health Practice)*

JAMES WOLFF. *Professor Emeritus of Pediatrics*

JOSEPH ZUBIN. *Professor Emeritus of Psychology*

The College of Physicians and Surgeons and Affiliated Hospitals

The College of Physicians and Surgeons is guided by the principle that medical education is university education. The acquisition of knowledge and skills is important in professional education, but far more vital is a profound understanding of the science, the art, and the ethic within which both knowledge and skill are applied. As a part of Columbia University, the College builds its curriculum, selects its officers of instruction, and marshals its enormous resources of equipment and clinical experience to develop in the student this understanding of medicine. Within the curriculum for the M.D. degree is the fundamental knowledge upon which later specialization is built, and from which the natural bent is discovered toward general or special practice, or toward research, teaching, or administration. The postgraduate programs of the College provide training in the specialties, help the graduate physician to keep abreast of new knowledge, and support the research from which the physician's knowledge develops.

Statement of Nondiscriminatory Policies

The University is required by certain Federal statutes and administrative regulations to publish the following statements.

Consistent with the requirements of Title IX of the Education Amendments of 1972, as amended, and Part 86 of 45 C.F.R., the University does not discriminate on the basis of sex in the conduct or operation of its education programs or activities (including employment therein and admission thereto). Inquiries concerning the application of Title IX and Part 86 of 45 C.F.R. may be referred to Ms. Rosalind S. Fink, the Director of the University's Office of Equal Opportunity and Affirmative Action (305 Low Memorial Library, New York, N.Y. 10027, telephone 212–280–5511), or to the Director, Office for Civil Rights (Region II), 26 Federal Plaza, New York, N.Y. 10007.

Columbia University admits students of any race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the University. It does not discriminate on the basis of race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other University–administered programs.

Consistent with the requirements of Section 504 of the Rehabilitation Act of 1973, as amended, and Part 84 of 45 C.F.R., the University does not discriminate on the basis of handicap in admission or access to, or employment in, its programs and activities. Section 503 of the Rehabilitation Act of 1973 requires affirmative action to employ and advance in employment qualified handicapped workers.

The University in addition desires to call attention to other laws and regulations that protect employees, students, and applicants.

Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination on the basis of race, color, or national origin in programs or activities receiving Federal financial assistance. Title VII of the Civil Rights Act of 1964, as amended, prohibits employment discrimination because of race, color, religion, sex or national origin. Executive Order 11246, as amended, prohibits discrimination in employment because of race, color, religion, sex or national origin and requires affirmative action to ensure equality of opportunity in all aspects of employment. In addition, New York Human Rights Law Article 15, Executive Law Section 296 prohibits discrimination in employment because of marital status.

The Equal Pay Act of 1963 prohibits discrimination on the basis of sex in rates of pay. The Age Discrimination in Employment Act of 1967, as amended, prohibits discrimination in employment on the basis of age.

The Columbia University Senate on December 1, 1978, passed a resolution announcing its general educational policy on discrimination which reaffirms the University's commitment to nondiscriminatory policies in the above-mentioned categories, as well as its policy not to discriminate on the basis of sexual orientation.

Section 402 of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, prohibits job discrimination and requires affirmative action to employ and advance in employment qualified special disabled veterans and veterans of the Vietnam era.

All employees, students, and applicants are protected from coercion, intimidation, interference or discrimination for filing a complaint or assisting in an investigation under any of the foregoing policies and laws.

The University's Office of Equal Opportunity and Affirmative Action has also been designated to coordinate the University's compliance activities under each of the programs referred to above. Any employee who believes that he or she has been denied equal opportunity should contact this Office, which will investigate complaints and counsel employees on questions relating to equal opportunity and affirmative action.

Rules of University Conduct

The Rules of University Conduct (Chapter XLI of the Statutes of the University) provide special disciplinary rules applicable to demonstrations, rallies, picketing, and the circulation of petitions. These rules are designed to protect the rights of free expression through peaceful demonstration while at the same time ensuring the proper functioning of the University and the protection of the rights of those who may be affected by such demonstrations.

The Rules of University Conduct are University-wide, and displace the normal disciplinary procedures of each School or Division ("Dean's discipline"), although a student who is charged with a violation of the Rules has the option of choosing Dean's discipline.

All University faculty, students, and staff are responsible for compliance with the Rules of University Conduct. Copies of the full text are available at the Office of the University Senate, 402 Low Memorial Library, at the Office of the Registrar, 208 Philosophy, and at the Office of Student Activities, 206 Ferris Booth Hall.

Reservation of University Rights

This bulletin is intended for the guidance of persons applying for or considering application for admission to Columbia University and for the guidance of Columbia students and faculty. The bulletin sets forth in general the manner in which the University intends to proceed with respect to the matters set forth herein, but the University reserves the right to depart without notice from the terms of this bulletin. This bulletin is not intended to be and should not be regarded as a contract between the University and any student or other person.

History of the College and University

Columbia University began as King's College, which was founded in 1754 by royal grant of George II, King of England, "for the Instruction of Youth in the Learned Languages, and the Liberal Arts and Sciences." The American Revolution interrupted its program, but in 1784 it was reopened as Columbia College. In 1912 the title was changed to Columbia University in the City of New York.

King's College organized a medical faculty in 1767 and was the first institution in the North American Colonies to confer the degree of Doctor of Medicine. The first graduates in medicine from the College were Robert Tucker and Samuel Kissam, who received the degree of Bachelor of Medicine in May 1769, and that of Doctor of Medicine in May 1770 and May 1771, respectively. Instruction in medicine was given until interrupted by the Revolution and the occupation of New York by the British, which lasted until November 25, 1783. In 1784 instruction was resumed in the academic departments, and in December of the same year the medical faculty was reestablished. In 1814 the medical faculty of Columbia College was merged with the College of Physicians and Surgeons, which had obtained an independent charter in 1807. In 1860, by agreement between the Trustees of the two institutions, the College of Physicians and Surgeons became the Medical Department of Columbia College; from that time on the diplomas of the graduates were signed by the President of Columbia College as well as by the

President of the College of Physicians and Surgeons. The connection was only a nominal one, however, until 1891, when the college was incorporated as an integral part of the University. Since September 1917, women have been admitted to the College on the same basis as men.

The Columbia-Presbyterian Medical Center was opened in the spring of 1928, seven years after the establishment of a permanent alliance between Columbia University and the Presbyterian Hospital. It consists of the following units: the divisions of the University Faculty of Medicine (the College of Physicians and Surgeons, the School of Nursing, the School of Public Health); the University School of Dental and Oral Surgery; the Presbyterian Hospital and its subdivisions; the New York State Psychiatric Institute; and the Washington Heights Health and Teaching Center.

The Medical Center occupies a plot of land given to Columbia University and the Presbyterian Hospital by Mrs. Stephen V. Harkness and Mr. Edward S. Harkness. It comprises about twenty acres extending from West 165th Street to West 168th Street and from Broadway to Riverside Drive and is readily accessible from all parts of the city. A map of the Medical Center is given on the inside back cover.

The College of Physicians and Surgeons is at 630 West 168th Street between Broadway and Fort Washington Avenue in a seventeen-story building, each floor of which connects with the wards and services of the Presbyterian Hospital. The William Black Medical Research Building is a twenty-story building, containing research laboratories for the faculty members of the College of Physicians and Surgeons. It is connected with the College building and is located at 168th Street and Fort Washington Avenue. The Julius and Armand Hammer Health Sciences Center, a twenty-story structure diagonally opposite the William Black Medical Research Building, opened its teaching, research, and library facilities in 1976.

Augustus C. Long Health Sciences Library

The Columbia University Health Sciences Library is housed in the Julius and Armand Hammer Health Sciences Center, 701 West 168th Street. The four floors occupied by the library offer a comfortable atmosphere conducive to study, including such amenities as individual study carrels, group study and conference rooms, typing rooms, and a leisure reading lounge.

With more than 400,000 volumes and a staff of 48, the Health Sciences Library is one of the largest medical center libraries in the United States. It is well able to serve the needs of faculty, students, and researchers in the health sciences disciplines. More than 3,400 periodicals are received regularly. The library includes a comprehensive media center equipped with audiovisual materials and equipment, a microcomputer room, and a significant rare book and special collections section. The library offers a wide array of information services, including computerized literature searching, individual consultation on research topics, and instruction on the use of information resources. Materials describing library services are available on request.

Other Columbia libraries, located on the Morningside campus, are open to all students and faculty who carry Columbia identification cards. The main collection is housed in Butler Library; special and departmental collections are housed in other buildings on the campus. Columbia students and faculty are also permitted access to the collections of approximately twenty-five other research institutions including Stanford and Yale Universities, under the auspices of the Research Libraries Group. Information about the Research Libraries Group can be obtained from the Health Sciences Library.

Comprehensive Cancer Center and Institute of Cancer Research

The Cancer Research Center was established in 1973. In 1979 the Center was awarded Comprehensive status by the National Cancer Institute in recognition of its broad responsibility for research, patient care, and cancer control activities. The Center coordinates, integrates, and facilitates cancer research, education, and patient care in the Health Sciences Faculties of Columbia University and its affiliated hospitals in New York City—Presbyterian, St. Luke's–

Roosevelt, Harlem—as well as Overlook in Summit, New Jersey, and Morristown Memorial Hospital in New Jersey. The Cancer Center was organized to effect the efficient and cooperative use of all Center resources, maximize the dissemination of information among Center personnel, stimulate basic cancer research, and facilitate the rapid translation of cancer research findings into programs for improving capabilities for the prevention of cancer and the diagnosis, treatment, and care of patients with cancer.

The Institute of Cancer Research of Columbia University College of Physicians and Surgeons was established in 1911 with funds bequeathed to the University by George Crocker. It moved from its original quarters on 116th Street to the campus of the Columbia-Presbyterian Medical Center in 1938.

The Comprehensive Cancer Center and the Institute of Cancer Research are mutually involved in a clinical and basic research cancer effort, although their administrations function autonomously.

The Centers for Community Health

The Centers for Community Health are composed of a Center for Health Services Research and a Collaborative Program in Oral Health with the School of Dental and Oral Surgery whose research program is one of the few in the country directed toward an area of health services which has long been neglected. The Centers provide a locus for student teaching and research by the Faculty of Medicine and the School of Public Health, especially health administration, on problems of the delivery, financing, and distribution of health care in a diverse group of institutions in the inner city and the suburbs.

Center for Geriatrics and Gerontology

The Center was established and funded by the Faculty of Medicine and the New York State Office of Mental Health and is a rich resource for teaching and research in geriatrics and gerontology in a group of medical as well as long-term care facilities and in community settings. The components of the Center comprise an independent entity in the Faculty of Medicine, a Division in the School of Public Health, and a Department in the New York State Psychiatric Institute. The Center was designated by the Administration on Aging as a long-term care gerontology center is for HHS region II. The Center has forged development of models for an alliance between the University and the community providers of care for the development of services to the elderly. Its major focus is cross-national research and the care of the elderly.

Howard Hughes Medical Institute Program in Molecular Neurobiology

The Program is the only one of the ten Hughes Medical Institute Programs in the country to be devoted to the neurosciences. Its establishment in 1984 made possible the scientific integration of the College's widely acclaimed research efforts in the neurobiology of learning and critical areas of molecular genetics. In addition to established investigators in these fields, the Center personnel include postdoctoral fellows, staff scientists, junior faculty, and support staff.

Center for the Study of Society and Medicine

The Center was established in 1982 to enrich the teaching and practice of medicine with the conceptual and policy insights of the social sciences and humanities. Its collaborative effort provides a unique opportunity for scholars trained in sociology, law, history, social work, philosophy, and economics to work together with medical clinicians and researchers. Principal members of the Center faculty have appointments in the Department of Medicine, which enables them to offer instructional programs taught jointly by clinicians, social scientists, and

humanists. Center faculty teams teach a required course for second-year medical students on the social forces shaping contemporary medical practice, conduct seminars for medical house staff, participate in daily hospital rounds, and lecture at Columbia-affiliated institutions.

Center for Clinical Research

The Center for Clinical Research is a resource for the purpose of stimulating multidisciplinary, intensive investigation of human disease. It includes a fourteen-bed Adult Unit, a four-bed Pediatric Unit, a Metabolic Diet Kitchen, an Outpatient Unit, a Core Laboratory, and a Computer Facility. The Center is designed so that acutely ill, as well as ambulatory patients, can be studied. Use of the Center is open to qualified faculty members of the clinical and basic science departments of the College of Physicians and Surgeons upon approval of the Advisory Committee. Although the primary purpose of the facility is concerned with research, it also provides unusual opportunities for undergraduate and postgraduate training in clinical investigation.

In the Adult Unit major research activities include bone and mineral metabolism, cardiac electrophysiology and pharmacology, cardiovascular pathophysiology, cardiac transplantation, endocrinology/endocrine transplantation, epidemiology, extracorporeal photochemotherapy, hypertension, immunology/rheumatology, lipid and lipoprotein metabolism, movement disorders, neuromuscular diseases, pharmacokinetics and antibiotics, porphyria, psychiatry, reproductive biology, secretory diarrheas, and thrombosis.

In the Pediatric Unit major research activities include hemolytic anemias, infant nutrition, lead poisoning, perinatology and total parenteral nutrition.

Gertrude H. Sergievsky Center

The Sergievsky Center is a center for research in the epidemiology of epilepsy, cerebral palsy, and developmental brain disorders. The Center has a core scientific faculty concerned with the development of research in the epidemiology of those diseases. Funded with an endowment, it participates in the teaching programs of the Epidemiology Division of the School of Public Health and the Departments of Neurology and Pediatrics and provides a major resource in epidemiology research and training in neuroepidemiology.

Institute of Human Nutrition

The Institute of Human Nutrition is an interdisciplinary unit whose mission is to study all aspects of nutrition that relate to human health. The Institute is organized into three primary divisions: Growth and Development, Nutrition and Metabolism, and Community Nutrition. Although each division conducts its own research program and offers its own program of instruction, these are highly integrated in order to achieve two basic goals: research in all areas of human nutrition and an integrated teaching program in areas of nutrition relevant to the physician and medical scientist.

To achieve this integration of purpose and at the same time allow for the specialization necessary for the best research and teaching, combined research projects between the divisions are under way, and joint seminars and courses involving faculty and students in all three divisions are conducted. Constant interchange of ideas is fostered through weekly combined staff conferences and special lectures which are open to the medical center community. Through its Master of Science, Doctor of Philosophy, and postdoctoral programs, the Institute aims to train individuals for scholarly activities in university and research centers that are in the forefront of the movement to advance nutrition as a health science.

The facilities of the Institute include laboratories in the William Black Medical Research Center, and the Obesity Center and Nutrition and Metabolic Research Center at St. Luke's Hospital Center. The office of the Director and other administrative offices are located on the seventh floor of the Health Sciences Center.

International Institute for the Study of Human Reproduction

The International Institute for the Study of Human Reproduction was founded in 1965 by Dr. Howard C. Taylor and was made possible by a substantial grant from the Ford Foundation. The primary purpose of the founders was to foster research in the sciences relevant to the solution of the world population problem. In more recent years, the aims of the Institute have been interpreted more broadly to include teaching, research, and the provision of clinical and social services related to the reproductive health of men and women. The Institute now consists of three centers.

The Center for Reproductive Sciences is a multidisciplinary group of basic and clinical research scientists with a specific interest in the overlapping field of genetics and early development, particularly concerned with understanding the mechanisms which control normal germ cell development, normal genome expression and their significance in the production of abnormal human offspring. The Center includes divisions of genetics of reproduction, molecular reproductive endocrinology, biochemistry of reproduction, male reproductive endocrinology, female reproductive endocrinology and primate neuroendocrinology. Individual and collaborative research has been carried out in specific basic science areas. Among them are gene expression in early development, the regulation of pituitary/hypothalamus peptide hormone gene expression, biochemistry, ultrastructure, and genetics of mammalian germ cell production, female primate reproductive neuroendocrinology, the ontogeny of sexual differentiation in organotypic tissue culture systems of the rodent brain, CNS gonadotropin receptors, kinetics of GnRH metabolism, the role of trace elements in spermatogenesis, biochemical kinetics of spermatogenesis, and chemistry of sperm motility. Clinical activities in human male and female reproductive endocrinology and genetics are also well represented with emphasis on hormonal or genetic infertility, induction of ovulation, and therapy of male infertility.

The aims of the Center for Population and Family Health are more specifically relevant to the social consequences of human reproduction. The Center's community-oriented Reproductive Health Services for Women Unit, in cooperation with the division of ambulatory care of the Department of Obstetrics and Gynecology, provides care, with emphasis on services for adolescents, to the community surrounding the Columbia-Presbyterian Medical Center. The Center's International Research and Technical Assistance Unit works with a number of foreign governments and with private organizations toward improved basic health and family planning services for poor people in developing countries. The Social Sciences Research Unit conducts ongoing evaluations of the Center's domestic reproductive service programs and carries out a basic research program on the causes and consequences of adolescent fertility. Finally, as a division of the School of Public Health, the Center provides academic programs leading to the M.P.H. and Dr.P.H. degrees in the fields of population/family planning, maternal and child health, and public health nutrition.

A third unit has recently been added to the Institute: the Center for Male Reproduction. The Center consists of an interdisciplinary group of basic scientists and clinicians engaged in the study and treatment of the diseases of the male reproductive system.

The offices of the Centers for Reproductive Sciences and for Male Reproduction are at 630 West 168th Street and the office for the Center for Population and Family Health is at 60 Haven Avenue, Floor B-3, New York, N.Y. 10032.

Affiliated Hospitals

The Presbyterian Hospital in the City of New York

Founded in 1868, the Hospital joined with the Columbia College of Physicians and Surgeons to form the Columbia-Presbyterian Medical Center, which opened in 1928. Under the terms of the permanent alliance agreement with Columbia University, members of the hospital staff are appointed by the Board of Trustees of the hospital on nomination by the Trustees of the University. The Presbyterian Hospital has an overall capacity of 1,291 beds and 48 bassinets. A major modernization effort begun in 1984 is scheduled for completion in 1988.

The Hospital includes all of the individual units described below:

Presbyterian Hospital is the single largest hospital pavilion.

The New York Orthopaedic Hospital opened as a dispensary in 1866 largely because of the interest taken in the care of the crippled by Theodore Roosevelt, father of the president of the same name. The hospital was located in its own buildings at 420 East 59th Street until December 1950, when it was merged with the Presbyterian Hospital as its orthopedic service.

Squier Urological Clinic is the Urology Service of the Presbyterian Hospital.

Sloane Hospital for Women, currently the Hospital's obstetrics and gynecology unit, was built at West 59th Street and Amsterdam Avenue and presented to Columbia University by Mr. and Mrs. William D. Sloane in 1886. It now is part of the Presbyterian Hospital's new Center for Women and Children.

Harkness Pavilion, erected when the Medical Center was established in 1928, is available for the accommodation of private and semiprivate patients from various services.

Babies Hospital, founded in 1887, provides for general medical and surgical care of infants and children up to their late teens, and care for premature babies. It is not part of the Center for Women and Children.

Neurological Institute, one of the first nongovernmental hospitals in the country for the treatment of diseases of the nervous system, was founded in 1909. It moved from East 67th Street to the Medical Center in 1929. The Institute includes facilities added in 1960 for psychiatric patients. It comprises the Hospital's Neurology and Neurological Surgery Services.

The Edward S. Harkness Eye Institute, site of the Hospital's Ophthalmology Service, opened in 1933. It has complete facilities for the medical and surgical treatment of adults and children with diseases of the eye. On January 1, 1940, the work of the Herman Knapp Memorial Eye Hospital was taken over by the Institute.

Vanderbilt Clinic was presented to Columbia University by the Vanderbilt family in 1888 and is the outpatient department for the Presbyterian Hospital.

The Mary Imogene Bassett Hospital

The Mary Imogene Bassett Hospital in Cooperstown, New York, is a rural hospital combining the characteristics of a university medical center with a dedication to the delivery of both primary health services to the local community and highly specialized services to a large referral area. The hospital has 180 beds and a staff of specialists who are all salaried and full time. In 1983 there were 146,000 visits to the Outpatient Department and 6,250 admissions. The teaching program for house staff and students is a highly personalized one based on a team approach to medical care. Members of the staff conduct biomedical research and are interested in models for the delivery of health care to the community. The library is unusually extensive for a hospital of this size, with over 22,000 volumes and about 600 subscribed journals. Since 1947 the hospital has had a formal affiliation with Columbia, and currently about 60 students from Columbia elect programs at the Mary Imogene Bassett Hospital.

Harlem Hospital Center

Harlem Hospital Center, founded in 1887, is a progressive acute general teaching hospital offering primary, secondary, and tertiary care for children and adults living in the Central Harlem area and environs. The main complex consists of seven buildings. Eleven strategically located satellites extend the hospital out into the community. Operating with 753 certified beds and managing over 450,000 annual clinic visits, the hospital functions as the primary health care provider for a catchment area of three and a half square miles. Since 1969, the College of Physicians and Surgeons, through a contractual arrangement with the New York City Health

and Hospitals Corporation, has been responsible for all professional medical services in this hospital and nominates its professional staff. This affiliation presents a unique opportunity for teaching students, interns, and residents in the traditional disciplines of medicine and provides increasing opportunities for involvement in community medicine.

The Helen Hayes Hospital

The Helen Hayes Hospital at West Haverstraw, New York, founded in 1900, is an independent rehabilitation hospital with complete medical services, owned and operated by the state through the New York State Health Department. Since 1966 the hospital has had a formal affiliation with Columbia University. The medical specialties and allied health professionals are organized into disability units that provide comprehensive care through an integrated team approach, providing unique educational opportunities for residents and allied health students. The hospital has over 800 admissions and 12,000 outpatient visits a year. In 1980 a new 206-bed hospital building was opened, work began on construction of new research quarters, and plans were completed for establishment of several major new research centers. The hospital's long-standing program of bioengineering research now becomes the Orthopedic Engineering and Research Center; to this will be added the Regional Bone Center, Regional Arthritis Center, and Neurology Center.

Morristown Memorial Hospital

Morristown Memorial Hospital is a regional hospital center offering comprehensive health services for the entire family. It is a voluntary, nonprofit institution with a history of community service dating back to 1892. The hospital has become a central health care facility serving Morris, Warren, Sussex, and Somerset counties, and a medical referral center for all of northwest New Jersey. Morristown Memorial is also a teaching hospital, with programs for medical, nursing, and technical staff. It became affiliated with the College of Physicians and Surgeons in 1979. Morristown Memorial, Overlook Hospital in Summit, and St. Barnabas Hospital in Livingston are members of the Shared Services Consortium pioneering regionalized health care services in northern New Jersey. With 689 beds, 1,800 employees, 550 nurses, a medical and dental staff of more than 550, and a full spectrum of basic and highly specialized services, Morristown Memorial combines the traditional advantages of a community hospital with the advanced capabilities of a progressive medical center. The hospital has two divisions: one where the emphasis is on acute care; the other, a center for preadmission testing, geriatric extended care, outpatient and alcoholic services, and planned facilities for subacute and rehabilitative care.

Overlook Hospital

Overlook Hospital in Summit, New Jersey, is a 551-bed suburban community hospital, founded in 1906, which became a teaching affiliate of the Columbia University College of Physicians and Surgeons in 1975. Overlook trains approximately 96 residents a year. It is a general, voluntary, nonprofit institution accommodating 25,000 inpatients and 100,000 outpatients each year. Overlook offers particularly strong training in family practice and primary care internal medicine and pediatrics through a program of broad-based clinical experience for graduate physicians. Outreach programs have been pioneered in alcoholism and other addictive illness, home-care and home-based hospice, and mobile intensive care utilizing paramedics. The hospital's Center for Community Health provides outpatient services including preadmission testing, ambulatory surgery and radiology, and a consumer health library. A construction/renovation project, which will increase the bed complement by 84, was initiated in 1983. Overlook maintains an open staff policy in regard to admissions to the medical staff, which at the present time numbers 550.

St. Luke's–Roosevelt Hospital Center

St. Luke's Hospital Center, which has included Woman's Hospital since 1953, merged with The Roosevelt Hospital in 1979, forming a Hospital Center containing 1,315 beds and serving a catchment area spanning Manhattan's west side from 34th to 134th Streets. Both hospitals had maintained teaching affiliations with the College of Physicians and Surgeons of Columbia University for many years before 1971, when they each became full University hospitals. The medical staff of the Hospital Center numbers over 1,200; the house staff consists of approximately 400 fellows and residents.

St. Luke's Hospital Center Division

St. Luke's was established in 1850 and has been on Morningside Heights next to the main Columbia campus since 1896. It merged with Woman's Hospital in 1953, and today the hospital complex contains 780 beds, including 63 pediatric beds, 58 obstetric beds, and 58 bassinets. Approximately 26,500 patients are admitted yearly to the four major and eleven specialty services.

St. Luke's is recognized as a leader in such fields as heart surgery, kidney transplantation, artificial kidney treatments, and noninvasive diagnosis (ultrasound). The Hospital Center's clinically oriented research projects are involved in such areas as blood diseases, coronary artery disease, gastroenterology, obesity and nutrition (it is the site of the only federally funded obesity research center), pulmonary disease, renal transplant-immunology, and bioengineering. A medical library of 32,000 volumes is an integral part of the Hospital Center. St. Luke's is both a major referral institution and a community hospital. The more than fifty specialty and subspecialty clinics see 50,000 patients yearly (totaling approximately 180,000 visits); the Emergency Room, a designated Trauma Center, is one of the busiest in Manhattan, with 77,000 visits annually. The Hospital Center also operates extensive community programs in alcoholism treatment, drug detoxification, and mental health.

Roosevelt Hospital Division

The Roosevelt Hospital treated its first patient in 1871. It contains 535 beds and bassinets. There are about 180,000 outpatient and emergency-room visits annually. Approximately 19,000 patients are admitted to this hospital yearly. The hospital is engaged in many research and teaching activities. A new research building containing 52,000 square feet of laboratory space for all departments was opened in 1973. The medical library contains 26,000 volumes and subscribes to 540 medical and technical journals. The hospital is actively engaged in community programs, as represented by its Children and Youth Program and by its Drug Addiction and Alcoholism Programs and many other outreach and community services sponsored by the Departments of Pediatrics, Psychiatry, and Medicine, and the ambulatory care division. The hospital's new emergency room treats over 51,000 people yearly.

New York State Psychiatric Institute

The Institute is the oldest psychiatric research institute in the United States. It was built and is maintained by the New York State Office of Mental Health. Through a contractual arrangement, it is affiliated with the College of Physicians and Surgeons. The Institute's functions are to do research into the causes and treatment of psychiatric illness, to provide education for mental health professionals, and to provide the highest quality of clinical care for patients with psychiatric disorders. The Institute currently maintains sixteen major research laboratories, a hospital, and a wide variety of specialized outpatient departments which provide diagnostic and treatment programs. The Lawrence C. Kolb Research Annex, a thirteen-story facility dedicated to psychiatric research, was opened in the autumn of 1982.

Admission, Registration, Expenses, and Financial Aid

Entering classes are enrolled in the College in August of each year. The minimum requirement for admission is attendance for three full academic years at an approved college of arts and sciences. Most applicants present four academic years and a bachelor's degree, although these are not required. The composition of our entering classes indicates, however, that only a relatively small number of three-year students have been accepted in the past by our Committee on Admissions.

The college program must have included English, physics, biology, organic chemistry (including at least one semester of laboratory), and some other course in chemistry covering at least one academic year. These requirements have been designated as mandatory not only by our faculty but by various state medical licensure boards as well; accordingly, applicants cannot be excused from them. Students applying for admission must also have taken the Medical College Admission Test within a year of the date of their application. The student may have concentrated in any area—in the natural sciences, social sciences, humanities, or arts—but evidence of a balanced education, as well as demonstrated interest and ability in the natural sciences, is preferred.

Application Procedure

Application for admission must be filed on a special form obtained from the Admissions Office of the Faculty of Medicine. Applications should be submitted as promptly as possible, though they are accepted only for the next incoming class. Application forms are available beginning in June of the year preceding admission, and they must be filed by October 15. The completed form must be accompanied by the application fee of $50. The fee helps to cover the cost of processing the application; it is therefore not returnable and is not credited toward tuition.

Applicants will be notified when their applications have been received. The Committee on Admissions, however, evaluates only completed applications, that is, those for which letters of recommendation have been received, along with MCAT scores and transcripts. Applicants will be notified, also, when their applications have been completed; if such notification is not received within sixty days after the date of the preliminary processing of an application, applicants should make inquiries at the Admissions Office to learn which items have not yet been received. Failure to receive letters of recommendation and transcripts is the most common cause of delay in the completion of applications.

If a personal interview is required in connection with the application, it will be requested only by the Admissions Office.

Selection of Students

The Committee on Admissions devotes months to the task of selecting a class of 148 from a very large number of applicants. Obviously there will be many well-qualified students whom the College will not be able to accept. The Faculty of Medicine recognizes its obligations in the field of medical education and research not only to the local area but to the nation as well. Admission will not be offered to any applicant who has not been interviewed by one of the College's representatives. Impressions from such an interview, as well as scores on the MCAT and academic records, will be considered in selecting individuals for admission. Other selection criteria are listed below.

The Committee places great importance on the fact that the students have learned to think for themselves, to explore, to work hard under their own initiative, to consider alternatives and make decisions, and to develop a desire for a continuous program of self-education. In the selection of students, preference is given to those who, in the opinion of the Committee on Admissions, have shown high achievement in their college education, a mature sense of values, sound motivation, qualities of leadership, and ability to assume responsibility, and to those who have

already given evidence that they are qualified to complete all requirements of our curriculum and to graduate as ethical, compassionate, and competent physicians.

The practice of medicine is both a science and an art and, to treat the patient as a whole person, the doctor must be a whole person. Students planning a career in medicine should be motivated toward becoming leaders in medical thinking, rather than technicians, because medical practice is both a private enterprise and a public responsibility. The liberal arts college offers the opportunity to prepare for a happier and more useful life of citizenship. Years of specialization lie ahead in a professional career, but the foundation of all advanced study is a broad liberal education, of which science is a part.

Admission to Advanced Standing

Only a very small number of vacancies occur during the medical course, and students can be accepted on transfer from other schools only when such vacancies do arise. Any student desiring to transfer from an accredited school of medicine to the upper classes of the College should communicate with the Admissions Office to learn if a vacancy exists.

Admission of Foreign Students

Applicants need not be citizens of this country but preferably should have received their premedical education at an accredited college or university in the United States or Canada. Applications may be submitted by individuals who have been educated elsewhere, but in the past the Committee on Admissions has had great difficulty in finding a satisfactory means of evaluating the caliber of education available in the many colleges and universities throughout the world. Likewise, the Committee will accept applications for admission with advanced standing to this school from individuals who have begun their medical education in schools outside the United States and Canada, but again it has usually been able to admit relatively few individuals, either to an entering class or with advanced standing, whose previous education has not been obtained in this country or Canada.

Registration

Before attending classes, each student must register in person at the Office of Student Information Services during the registration period listed in the Academic Calendar. The Office of Student Information Services, on the first floor of the Black Building, is open from 9 a.m. to 4:30 p.m. daily except Saturdays, Sundays, and holidays.

All students are asked to give Social Security numbers when registering in the University. However, Social Security numbers are required of foreign students *only* when those students will be receiving payment from the University. Foreign students should consult the Office of Foreign Student Services, 208 Lewisohn Hall, for further information. Other students who do not have Social Security numbers should obtain them from their local Social Security offices *well in advance of registration.*

Students who are not citizens of the United States and who need authorization for special billing of tuition and/or fees to foreign institutions, agencies, or sponsors should go to the Foreign Student Adviser with two copies of the sponsorship letter. Special billing authorization is required of students whose bills are to be sent to a third party for payment.

Regulations

According to University regulations, each person whose registration has been completed will be considered a student of the University during the term for which he or she is registered unless the student's connection with the University is officially severed by withdrawal or otherwise. No student registered in any school or college of the University shall at the same time be registered in any other school or college, either of Columbia University or of any other institu-

tion, without the specific authorization of the dean or director of the school or college of the University in which he or she is first registered.

The privileges of the University are not available to any student until he or she has completed registration. A student who is not officially registered for a University course may not attend the course unless granted auditing privileges (see below). No student may register after the stated period without the written consent of the appropriate dean or director.

The University reserves the right to withhold the privilege of registration or any other University privilege from any person with unpaid indebtedness to the University.

Conduct

All members of the University community, its visitors and guests, are governed by the Rules of University Conduct, which apply to all demonstrations, including rallies and picketing, that take place on or at a University facility. It is the student's responsibility to be aware of all provisions, regulations, and procedures contained in the Rules. Copies are available in the Office of the University Senate, 406 Low Memorial Library.

Attendance

Students are held accountable for absences incurred owing to late enrollment.

Religious Holidays

It is the policy of the University to respect its members' observance of their major religious holidays. Officers of administration and of instruction responsible for the scheduling of required academic activities or essential services are expected to avoid conflict with such holidays as much as possible. Such activities include examinations, registration, and various deadlines that are a part of the academic calendar. (See the *Academic Calendar* for dates of religious holidays.)

Where scheduling conflicts prove unavoidable, no student will be penalized for absence for religious reasons, and alternative means will be sought for satisfying the academic requirements involved. If a suitable arrangement cannot be worked out between the student and the instructor involved, students and instructors should consult the appropriate dean or director. If an additional appeal is needed, it may be taken to the Provost.

Auditing Courses

Degree candidates in good standing who are enrolled for a full-time program in the current term may audit one or two courses (except during the summer term) in any division of the University without charge by filing a formal application in the Office of Student Information Services (Black Building, Room 141) no later than September 12 in the autumn term and January 28 in the spring term. Applications require (*a*) the certification of the Registrar that the student is eligible to audit and (*b*) the approval of the dean of the school in which the courses are offered.

For obvious reasons, elementary language courses, studio courses, applied music courses, laboratory courses, and seminars are not open to auditors; other courses may be closed because of space limitations. In no case will an audited course appear on a student's record, nor is it possible to turn an audited course into a credit course by paying the fee after the fact. Courses previously taken for credit may not be audited.

Fees

The following fees, prescribed by statute, are in effect for 1986–1987 and are subject to change at the discretion of the Trustees.

University charges such as tuition and fees and residence halls and board plans are due and payable in full by the date announced before the beginning of each term. The full amount of any

charge may be paid when due without penalty, or payment may be made in installments. If partial payments are made, a **FINANCE CHARGE** is assessed on amounts not paid by the due date on the initial bill received prior to registration and thereafter as indicated on subsequent monthly bills. In either event, however, the student is required to sign a Retail Installment Credit Agreement at the time of registration which sets forth the terms and conditions of payment. All charges must be paid by the end of the term.

It is the policy of the University to withhold diplomas, certificates, and transcripts until all financial obligations have been met. Candidates for graduation are urged to pay their bills in full at least one month prior to graduation.

In the event a diploma, certificate, or transcript is withheld because of an unpaid bill, a student will be **required** to use a certified check, money order, or cash to release any of the aforementioned documents.

Tuition

For the full course in medicine for one academic year (or the equivalent), payable in two installments	$13,956.00

Health Service and Hospital Insurance Fees

The following fees, prescribed by statute, are subject to change at the discretion of the Trustees. For all full-time students, per year (September 1–August 31)

Health service fee	$375.00
Hospital insurance premium	257.00

The student health service fee contributes to the cost of operating the Student Health Service. The hospital insurance fee pays the annual premium to the Associated Hospital Service of New York. Participation in these programs is compulsory for all full-time students; students who already carry hospital insurance, however, will be charged the health service fee only. Proof of comparable coverage must be shown at the time of registration. Upon payment of additional fees, students can acquire hospital insurance coverage for their dependents and the latter are eligible to receive the benefits of the health service program. Students should consult the Office of Student Information Services, Black Building, Room 141, for further information on dependent coverage.

The Student Health Service, which holds daily office hours, is on the street level of Bard Haven Tower 1 (60 Haven Avenue).

Application Fees

For admission	$50.00
For late application, or late renewal of application, for a degree	50.00

Late Registration Fees

	Full-Time	*Part-Time*
During late registration	$ 50.00	$ 50.00
After late registration	100.00	100.00

Withdrawal and Adjustment of Fees

A student in good academic standing who is not subject to discipline will always be given an honorable dismissal if he or she wishes to withdraw from the University. Withdrawal is defined as the dropping of one's *entire* program in a given semester as opposed to dropping a portion of one's program.

Any student withdrawing must notify the Office of Student Information Services in writing: failure to attend classes or notification of instructors does not constitute formal withdrawal and will result in failing grades in all courses. Any adjustment of the tuition that the student has paid is reckoned from the date on which the Office receives the student's written notification. Application fees, late fees, and special fees are not refundable.

In addition, at a minimum the following amount of tuition will be retained by the University:

Full-time study	$75.00
Part-time study	40.00

After the last day to change programs in each term, the above amount is retained **plus** an additional percentage of the remaining tuition (as indicated in the adjustment schedule below) for each week, or part of a week, that the student remains registered after these dates. The student is considered registered until the date on which written notice of withdrawal is received by the Office of Student Information Services. A student's financial assistance is adjusted to reflect reductions in the student's overall budget. Excess financial aid is restored proportionately to the funds from which it was drawn before a refund is given.

Adjustment Schedule

	Minimum Tuition Retained	*Percentage of Remaining Tuition Retained*
Up to and including dates specified above	$40 or $75	0
Following week	40 or 75	10
Second following week	40 or 75	20
Third following week	40 or 75	30
Fourth following week	40 or 75	45
Fifth following week	40 or 75	60
Sixth following week	40 or 75	75
Seventh following week	40 or 75	90
Eighth following week	40 or 75	100 (no adjustment)

Application or Renewal of Application for a Degree

Degrees are awarded three times a year—in October, January, and May. A candidate for any Columbia degree (except the Ph.D. degree) must file an application with the Office of Student Information Services, 630 West 168th Street. In the 1986–1987 academic year, the last day to file for an October degree is August 1; for a January degree, October 31; and for a May degree, February 17. A late fee of $50 will be charged after these dates and until the expiration of the *late* filing period for each conferral date (September 4 for October degrees, December 5 for January degrees, March 30 for May degrees).

If the student fails to earn the degree by the conferral date for which he or she has made application, the student may renew the application. A $50 late fee will be charged for late filing of renewals of application according to the same schedule as for original applications (see above).

Requests for Transcripts

The Family Educational Rights and Privacy Act of 1974 as amended prohibits the release of educational records by institutions without the specific written consent of the student or alumnus. Students or alumni may request copies of their records by writing to the Office of Student Information Services, Columbia University, 141 Black Building, 630 West 168th Street, New York, N.Y. 10032. *Official* copies will be sent directly by the University only to an official address such as another university, a business firm, or government agency. However, students or alumni may request that unofficial copies of their transcripts (stamped "Student Copy") be sent directly to them.

There is a charge of $5 for each transcript requested singly, or $5 for the first copy and $1 for each additional copy requested at the same time. There is no charge for intrauniversity copies sent between University offices. Transcript requests are processed in the order received and require five to seven working days for processing. Specific deadlines should be mentioned, and checks accompanying requests should be made payable to Columbia University.

Estimated Expenses

Current educational expenses for a student attending the College during the *first academic year* are as follows:

Tuition	$13,956.00
Health and Hospitalization Insurance Fees	630.00
Books and supplies	700.00
Microscope rental cost and other equipment	600.00

In addition to the educational costs listed above, each first-year student should budget approximately $6,780 to cover housing ($3,160), food ($2,340), clothing, laundry and dry cleaning ($400), and miscellaneous expenses ($880).

There are differences in the length of each academic year, and living and miscellaneous expenses vary. Each year the College Committee on Financial Aid prepares a statement of estimated expenses for students in each year of the medical school curriculum. These statements are given to all financial aid applicants at the time of distribution of the financial aid policy statement.

Microscope, Instruments, and Books

Students are required to have microscopes for courses in the first and second years of medical school. A microscope rental service is operated by the Medical Center Bookstore. For students who wish to purchase a new or used microscope, the faculty recommends a binocular instrument of standard make, complete with carrying case, built-in illuminator, and quadruple nosepiece (4X, 10X, 40X, and 100X oil-immersion objectives).

Students are required to purchase dissection equipment for the first-year course in gross anatomy and instruments for the diagnostic examination of patients.

The books required or recommended for courses of instruction are announced at the beginning of each academic year.

Housing

There are three types of housing available to incoming P&S students: *(a) University Residence Halls*—traditional "dormitory rooms" for single students, *(b) University Real Estate Management Properties*—apartment accommodations owned and operated by the University for married students, and *(c) Off-Campus Housing*—rooms and apartments owned and operated by landlords other than the University and not subject to inspection or approval by the University.

University Residence Halls

All newly accepted single medical students who apply for housing are guaranteed an accommodation in UNIVERSITY RESIDENCE HALLS–Bard Hall. Bard Hall, located at 50 Haven Avenue overlooking Riverside Park and the Hudson River, is an 11-story facility which includes both a residence hall and student commons. The residence hall facility houses 305 students in single rooms. Each room is approximately 10′ × 13′. Many of the rooms are equipped with a sink. There is a community shower and bathroom on each floor. The student commons includes a lounge, dining room, laundry, and athletic area.

University Real Estate Management Apartments

All newly accepted married medical students who apply for housing are guaranteed a University Real Estate Management Apartment in Bard-Haven Towers. The Bard-Haven Towers complex includes three, thirty-one-story, high-rise apartment towers. Each tower provides one, two, and three bedroom apartment accommodations. One bedroom apartments (line A&F) in Tower I have been reserved for married students. All apartments are unfurnished and include a full kitchen and bath. Gas, electricity, and telephone service are not included. Each building has laundry facilities, elevator service, and doorman service.

Off-Campus Housing

Student who seek Off-Campus Housing may utilize the Off-Campus Housing Inventory maintained in the Health Sciences Housing Office.

Towers Waitlist

Single students who have received University Residence Halls housing in Bard Hall for their first year of medical school may apply for a University Real Estate Management Apartment in Bard-Haven Towers for their second or third year. There is a wait list for this type of housing. Applications for the Tower's Wait List are distributed by the Health Sciences Housing Office in late September.

All housing inquiries should be directed to: The Health Sciences Housing Office, Bard Hall, 50 Haven Avenue, New York, N.Y. 10032.

Financial Aid

All financial aid awards are based on demonstrated need. Each year applicants for financial aid are required to borrow a sum of money (unit loan) before becoming eligible for scholarships administered by the College. Financial aid awards are intended to supplement, rather than substitute for, the student's resources and parental contributions.

The federal government makes available each year a limited number of one-year full scholarships for first-year students of Exceptional Financial Need (EFN). Funds are allocated to medical schools, who are responsible for selection of EFN recipients. Students need not request consideration for these funds directly. Awards are determined from the information provided on the financial aid application. Continuation of federal funding for this program is uncertain.

Upon acceptance by the College, students receive the financial aid policy statement, loan interest and repayment information, and an application form which must be completed promptly. Students enrolled in the College are informed annually about the policies for the coming academic year and the dates for submission of the financial aid application and loan applications. Further information may be obtained from the Financial Aid Office of the College of Physicians and Surgeons, telephone (212) 305-4100.

Spouses of medical students should consult the personnel offices of the College of Physicians and Surgeons and of the Presbyterian Hospital for information regarding employment opportunities at the Medical Center.

Scholarships

Students are urged to determine the availability of scholarship assistance from the states in which they reside and to make application for such funds when appropriate. As an example, New York State provides funds through the Tuition Assistance Program to residents who meet financial qualifications. In addition, New York State offers the New York Regents Health Care Scholarships for Medicine and Dentistry. Awards will go up to $10,000 per year. Applicants must be legal residents of New York State for one year prior to September 1, 1986, and be

enrolled in a medical school or be candidates for admission to a medical school. Applicants must agree to practice medicine in an area of New York State designated as a shortage area. Awards will be made to eligible candidates in the following order of priority: (1) Candidate is economically disadvantaged and a minority group member historically under-represented in the profession, (2) Candidate is a minority group member under-represented in the profession, and (3) Candidate completed undergraduate work through assistance from the HEOP, EOP, SEEK, or College Discovery opportunity programs. Applications and instructions may be obtained from:

Loan Forgiveness and Professional Opportunity Scholarship Programs
Bureau of Higher and Professional Educational Testing
Cultural Education Center, Room 5C64
Empire State Plaza
Albany, New York 12230
(518) 474-6394

Applicants to medical school should also consult college premedical offices for information on the competitive New York State Regents Scholarships for Professional Study of Medicine. Applications are due between the October and February prior to matriculation. Students should be advised that these deadlines are strictly adhered to.

Among nongovernmental sources of funding there is the National Medical Fellowships, Inc., which awards fellowships to needy black Americans, American Indians, Mexican-Americans, and mainland Puerto Ricans. Applicants must be citizens of the United States or permanent residents (visa status). Awards are given to first- and second-year medical students. Enrolled medical students should apply to NMF at 254 West 31st Street, New York, N.Y. 10001 before March 1 for financial assistance for the second year of medical school. Applicants to medical school should request information from NMF.

The R. G. Haddad Foundation Scholarship is available for enrolled medical students who are United States citizens of Syrian or Lebanese descent. Applicants must have verified financial need. A grant for one year may be renewed upon application. The Financial Aid Office of the College of Physicians and Surgeons advises students of the availability of this scholarship annually.

There are a number of scholarship funds administered by the Financial Aid Office of the College. With the exception of the Lawrence John Durante Scholarship (see below), students do not apply directly for these scholarships. The named scholarships listed below have been donated by alumni, foundations, corporations, and friends of the University and are awarded to qualified students by the Financial Aid Office. Students are assured consideration for these funds by applying regularly for financial aid.

Endowed Scholarship Funds

ALLEN Gift of Mrs. Vivian B. Allen.

ALUMNI A limited number of national scholarships. Provided by gifts from the P&S Alumni Association and other contributors.

ANONYMOUS Several; awarded annually.

BANBURY From the Banbury Scholarship Fund.

ALICE IDA AND ABRAHAM PENNER BERNHEIM SCHOLARSHIP FUND For tuition.

ISAAC J. AND RENA HENLY BERNHEIM Given by the family in honor of Isaac J. and Rena Henly Bernheim.

ELSIE J. BIRTWHISTLE Founded by the will of Morell Birtwhistle, in memory of his wife.

GEORGE BLUMENTHAL, JR. From the George Blumenthal, Jr., Fund.

ELIZABETH ROCK BRACKETT SCHOLARSHIP FUND Bequest of Dr. Brackett, the income to be used for scholarship assistance for women medical students studying under the Faculty of Medicine.

DANIEL NOYES BROWN SCHOLARSHIP FUND Established in honor of Daniel Noyes Brown, P&S '32.

LUCIEN AND ETHEL BROWNSTONE MERIT MEDICAL SCHOLARSHIP FUND A merit scholarship awarded every four years.

DR. MOSES R. BUCHMAN MEMORIAL Open to undergraduate medical students, with preference given to those who are residents of Westchester and who plan to practice pediatrics. Established by friends of Dr. Buchman.

DAVID C. BULL MEMORIAL In memory of Dr. David C. Bull, a former member of the Department of Surgery.

DR. H. GRIFFIN BULLWINKEL AND MRS. LOLA LENHART BULLWINKEL FUND Given by Mrs. Bullwinkel in memory of her husband, Columbia College Class of 1917, P&S Class of 1920.

RICHARD BUTLER Open to men born in the state of Ohio who are qualified for admission to, and plan to enter, Columbia College, the Graduate School of Arts and Sciences, the School of Law, the School of Engineering and Applied Science, or the College of Physicians and Surgeons.

LISLE C. CARTER SCHOLARSHIP FUND Established through the generosity of the Emilie H. Siebert Trust, for disadvantaged minority students.

ALONZO CLARK Founded by the will of Alonzo Clark, M.D., LL.D., for many years president of the College of Physicians and Surgeons.

CLASS OF 1890 Given by a member of the class.

CLASS OF 1899 Given by the class in commemoration of the thirty-fifth anniversary of its graduation.

CLASS OF 1912 Given by the class on the fifteenth anniversary of its graduation.

CLASS OF 1913 For medical student scholarships.

CLASS OF 1920 Given by the class on the twenty-fifth anniversary of its graduation.

CLASS OF 1924 To commemorate the fiftieth anniversary of their graduation.

CLASS OF 1928 Given at their tenth reunion.

CLASS OF 1932 For a scholarship room. Given by the class on the twenty-fifth anniversary of its graduation.

CLASS OF 1933 For a scholarship.

CLASS OF 1934 Awarded for medical student scholarships.

CLASS OF 1936 Given by the class on the twenty-fifth anniversary of its graduation.

CLASS OF 1937 Awarded for tuition of medical students.

CLASS OF 1938 Awarded annually to assist a student in the College of Physicians and Surgeons.

CLASS OF 1939 Awarded for medical student scholarships.

CLASS OF 1940 Awarded for medical student scholarships.

CLASS OF 1942 Awarded for medical student scholarships.

CLASS OF 1952 Given by members of the class on the tenth anniversary of its graduation.

CLASS OF 1953 Given by members of the class.

CLASS OF 1964 Established in memory of Dr. Howard Gerstel.

HENRY D. CRUGER Bequest of Helen Cruger, in memory of the Henry D. Cruger family.

CHARLES A. DANA FOUNDATION, Inc. Established by the Foundation.

ANTHONY M. DeANGELIS Open to a student of the fourth-year class. Given by Dr. Anthony M. DeAngelis.

HORACE DENNETT Open to students in the third- and fourth-year classes.

DR. HERBERT JACKSON DESHON SCHOLARSHIP FUND Established by bequest of Dr. DeShon, P&S '30.

DAVID M. DEVENDORF Preference is given to a candidate from Herkimer County, New York, preferably one from the town of Herkimer. Given by Mrs. David M. Devendorf of Herkimer, New York, in memory of her husband, Dr. David M. Devendorf, Class of 1861.

FRANCIS E. DOUGHTY Given by Miss Phoebe Caroline Swords, in memory of Dr. Francis E. Doughty, Class of 1869.

LAWRENCE JOHN DURANTE Given by members of the Class of 1961, in memory of Lawrence John Durante. Awarded annually to a senior student with verified financial need by the Durante Scholarship Fund Committee after review of the applications of qualified students.

EDWARD PERCY EGLEE Bequest of Edward Percy Eglee, Class of 1913, member of the Faculty of the College of Physicians and Surgeons from 1919 until his retirement in 1953, when he was a clinical professor of medicine.

JOSEPH HERMAN AND HANNAH EICHNER Established by the will of Benjamin Bernard Eichner, Class of 1919.

JOSEPH C. FOSTER Given by Mrs. Esther J. Foster, in memory of her husband.

VIRGINIA KNEELAND FRANTZ Bequest of Dr. Frantz.

NELLIE ALDEN FRANZ Bequest of Nellie A. Franz to Columbia University for scholarships to worthy young women for undergraduate or graduate study, with preference for those interested in medicine, nursing, sociology, and journalism.

ARTHUR AND CORNELIA GANS SCHOLARSHIP FUND Bequest of Cornelia Gans to the College of Physicians and Surgeons to provide scholarships for needy and worthy students of American or Dutch nationality.

GEORGE AND CHARLIE Given by the Alumni Association of the College, in memory of George Peters and Charles Costello, long-time employees of the Medical Center.

ROBERT I. GRAUSMAN SCHOLARSHIP FUND Established by Dr. Grausman, P&S '21, and continued in his memory by family and friends.

JACOB HARSEN Given by Dr. Jacob Harsen.

FRANK HARTLEY Given by friends and colleagues of Dr. Frank Hartley, class of 1880.

HELEN HAYES Established by the College of Physicians and Surgeons to honor Miss Hayes for her four decades of service and devotion to the Helen Hayes Hospital, a New York State–owned Columbia affiliate.

HAROLD HELM Established by the College to honor Mr. Helm, for his statesmanship and leadership as chairman of the Medi/Center I campaign and for all his efforts on behalf of the University.

WILLIAM H. HEMINGWAY

AARON HIMMELSTEIN MEMORIAL Open to undergraduate medical students. Given by Dr. Himmelstein's friends and colleagues.

IRMA T. HIRSCHL SCHOLARSHIPS From the estate of Irma T. Hirschl. Awarded on the criteria of financial need, outstanding scholarship and dedication to medical science, the easing of pain and protection of life.

MADAME LEIN-SUN HO SCHOLARSHIP FUND Established by Dr. Karen K. Fu, P&S '67, in memory of her mother.

CHARLES EUGENE HUBER, SR. Bequest of Francis D. Huber, in memory of his father.

FRANCIS HUBER Open to a graduate of any institution other than Columbia University, City College, Barnard College, or Hunter College. Given by Dr. Francis Huber.

VIOLA B. HUBER Open to a graduate of Hunter College. Given by Dr. Francis Huber.

ABRAHAM JACOBI For graduates of Columbia University and City College. Given by Dr. Francis Huber, in memory of Dr. Abraham Jacobi.

EDWARD R. JEAL Awarded to deserving students studying under the Faculty of Medicine.

CHARLES CHRISTIAN LIEB Awarded to a student interested in the study of pharmacology. Given in memory of Dr. Charles Christian Lieb, Hosack Professor of Pharmacology.

LI MING Awarded with preference to students of Chinese birth or descent or nationality. Established by bequest of Mr. Li Ming.

MARJORIE McANENY Open to a graduate of Barnard College. Given by Dr. Francis Huber.

ELIZABETH HALL McCULLOGH Given by Mrs. William G. Heaphy, in memory of her sister, Dr. Elizabeth McCullogh, an alumna of the College of Physicians and Surgeons.

MALCOLM X SCHOLARSHIP FUND Established by the College of Physicians and Surgeons to help further the education of black students interested in medical and public health problems prevalent in black communities.

HERBERT D. MANLEY Given as bequest by the late Dr. Herbert D. Manley.

FRANCIS HARTMAN MARKOE Given by Madeline Shelton Markoe, in memory of her husband.

M. MONTGOMERY MAZE From the estate of M. Montgomery Maze, Pearl River, N.Y. Part of this fund may be used for scholarships and/or fellowships, preferably for graduates of the Pearl River High School.

MABEL C. MEAD Awarded to women students of Chinese ancestry. Preference given to those desiring to study medicine.

VIVIAN AND SEYMOUR MILSTEIN ENDOWMENT FOR SCHOLARSHIPS Established by the donors in honor of their friends and physicians, Drs. David Habif and Duane Todd.

SAMUEL J. MORITZ MEMORIAL Given by the executors of the estate of Samuel J. Moritz.

GULLI LINDH MULLER Bequest of the donor to be awarded with preference to a gifted woman student.

P&S SCHOLARSHIP AID AND LOAN FUND Established by the wives of the members of the Faculty of Medicine, faculty, and friends of the College.

RUDOLPH AND MARY E. PFEIFFER Given by Mrs. Mary E. Pfeiffer.

TOUSSIA AND KERMIT PINES SCHOLARSHIP FUND Endowed by Florence and Herbert Irving.

PRESBYTERIAN HOSPITAL ALUMNI SCHOLARSHIP Granted with preference to sons or daughters of alumni of Presbyterian Hospital. Given by the Society of the Alumni of Presbyterian Hospital.

WILLIAM COLE RAPPLEYE Established at the retirement of Dean Rappleye.

RICHARD RHODEBECK Given by Mrs. Richard Rhodebeck, in memory of her husband.

JAMES RODISH MEMORIAL SCHOLARSHIP Established by family and friends in memory of James Rodish, to be awarded in alternate years to a student in the School of Nursing and a student in the College of Physicians and Surgeons.

DAVID H. ROUS From family, friends, and business associates of David H. Rous, the income to be divided equally among the Graduate School of Business, Columbia College, and the College of Physicians and Surgeons.

LOUIS AND RACHAEL RUDIN Established by the Rudin Foundation for students of excellence who would not otherwise be able to complete their education.

SAGAMORE Awarded to needy students.

JOSEPH F. SAPHIR MEMORIAL Given by Elsa M. Saphir, in memory of her husband, Joseph F. Saphir, Class of 1902.

THE MARY S. SAXE SCHOLARSHIP FUND Bequest of Mary S. Saxe.

AURA E. SEVERINGHAUS Given by faculty members, alumni, and students, in honor of Dr. Severinghaus's services to the College.

BERNARD E. SMITH MEMORIAL Given by Mrs. Gertrude Smith, in memory of her husband.

THE JAMES A. STEVENSON MEMORIAL SCHOLARSHIP Established by Mrs. Ann Stevenson Hardesty, in memory of her brother James Albert Stevenson, Class of 1943.

EDGAR EGINTON STEWART, Jr., MEMORIAL Given by Dr. E. E. Stewart, in memory of his son.

ARTHUR PURDY STOUT MEMORIAL Given by the Arthur Purdy Stout Society.

ARNOLD STURMDORF Awarded to one or more students in their third or fourth year of medical school. Bequest of Miriam Sturmdorf.

HAROLD S. VAUGHAN Bequest of Dr. Harold Vaughan, Class of 1904.

ANDREA VICALE MEMORIAL Established by Dr. Carmine T. Vicale, in memory of his father.

HERMANN VOLLMER Established in his memory by his wife.

THEODORE L. VOSSELER Preference is given to graduates of Colgate University. Given by Dr. Allison J. Vosseler, Class of 1933, in memory of his father, Dr. Theodore L. Vosseler.

ROBERT M. WECHSLER Given by Dr. I. S. Wechsler, in memory of his son, Robert M. Wechsler, Class of 1945, and by members of the Class of 1945, in memory of their classmate.

WHITING—Dr. FORDYCE B. St. JOHN SCHOLARSHIP FUND Gift by the Mrs. Giles Whiting Foundation, in honor of Dr. Fordyce B. St. John.

Dr. JAMES LANCELOT WILSON Awarded to a student selected by the College of Physicians and Surgeons.

LYDIA AND DAVID WOLF SCHOLARSHIP FUND Given by Mr. and Mrs. Wolf to support a needy student of high academic standing and promise.

JOHN C. WOOD MEMORIAL Established by family and friends in memory of Dr. Wood, Class of 1976.

Gift Funds

VALERIE AND GEORGE DELACORTE FOUNDATION Annual gift.

GENERAL SCHOLARSHIP GIFT FUND Gifts and memorials by various donors.

HARLOW KEITH HAMMOND TRUST SCHOLARSHIP FUND

CHARLES F. IKLE SCHOLARSHIP AND RESEARCH FUND Grant by the New York Community Trust.

JAMES T. LEE FOUNDATION, Inc. Annual grant to medical students.

AURA E. SEVERINGHAUS Established by the Clark Foundation as an unrestricted, discretionary fund to be used primarily for the support of students and student activities. Priority given to fourth-year students who are subjected to increased living and transportation costs because of electing clerkships at the Mary Imogene Bassett Hospital, Cooperstown, N.Y.

JULIUS E. STOLFI MEDICAL EDUCATION AND RESEARCH FUND SCHOLARSHIP

THE SULZBERGER FOUNDATION Annual gift. Awarded to senior students with very good academic records, significant financial need, and plans to pursue careers in family medicine or general internal medicine in nonurban areas.

Loans

Loans are available to all full-time medical students. These funds are provided by various sources, including the federal and state governments, the University, and also private agencies, as outlined below.

Foreign students who hold an F-1 student visa are eligible to borrow only from University funds and must have comakers who are citizens or permanent residents of the United States. Comakers should not be University employees. Foreign students may borrow from federal or state loan funds upon being granted permanent resident visa status in the United States.

Health Professions Student Loans. Funds were originally allocated by the Bureau of Health Manpower of the Department of Health and Human Services to individual medical schools, which are responsible for determining both the recipients of such funds and the amounts to be loaned. Assuming the availability of adequate funding, the maximum loan to a student in an academic year is the cost of tuition plus $2,500. Loans are repayable to the school over a ten-year period beginning one year after completing or interrupting the prescribed full-time course of study. Interest at the annual rate of 9 percent begins to accrue when the loan becomes repayable.

Repayment of Health Professions Loans may be *deferred* up to three years for those who become members of a uniformed federal service on sustained full-time duty (i.e., the Army, Navy, Air Force, Marine Corps, Coast Guard, Coast and Geodetic Survey), the Public Health Service, or the Peace Corps. For those pursuing advanced professional training, repayment may be deferred to completion of the training program. Interest does not accrue during period of deferment.

Health Professions Loans are *forgiven* or *cancelled* under certain conditions: (I) In the instance of students who agree to practice medicine for at least two years in a region of a state that has been determined to need additional personnel, the federal government will repay 60 percent of the outstanding principal and interest on any educational loan(s) for the cost of professional education. For a third year of practice in such an area, an additional 25 percent of the loan(s) will be repaid. (2) The outstanding loans of students who fail to complete their health professions

studies will be repaid if they are in exceptionally needy circumstances, from a low-income or disadvantaged family, and cannot be expected to resume studies within two years. (3) Loans of students who die or suffer permanent and total disability will be cancelled. Repayment of loans for service in shortage areas is subject to annual allocation of funds from the federal government.

National Direct Student Loans. Funds are allocated by the Department of Education to schools which are responsible for determining both the recipients of such funds and the amounts to be awarded. The total (undergraduate and graduate school loans) available to a student from the NDSL program is $12,000. The current interest rate, payable during the repayment period, is 5 percent on the unpaid principal. Repayment begins six months after graduation or after leaving school. The repayment period may extend up to ten years. Repayment may be deferred for up to three years during active U.S. military service, during service in the Peace Corps or Volunteers in Service to America (VISTA), during service in the National Health Service Corps, or for up to two years during service in an internship required to begin professional practice.

Federal and State Guaranteed Loans. Under the auspices of the Bureau of Student Financial Assistance of the Department of Education, federally insured loans are available to students with demonstrated financial need. The loans are made by authorized banks, savings-and-loan associations, credit unions, pension funds, and insurance companies. The maximum loan each academic year under this program is $5,000, and the total outstanding loan balance at any one time may not exceed $25,000. Lending institutions participating in this program can provide information regarding interest rates, repayment, and deferment of repayment.

Auxiliary Loan to Assist Students. ALAS is a new federally insured loan program available to graduate students, who may borrow up to $3,000 a year at 12 or 14 percent interest. Repayment of the principal is deferred while students are in school full time, but interest payments must be made while enrolled. Since authorized deferments are the same as those for the guaranteed student loan program, a student may continue to pay interest only during the first two years of residency, beginning repayment of both principal and interest following that period. The aggregate indebtedness for graduate students is $15,000 under this program. This loan must be taken at the same bank as the GSL if a student borrows a GSL in New York State. This rule may also apply in other states. Students who are not New York State residents should be able to make an ALAS loan at a bank in New York if they are unable to borrow from their local lender.

Health Education Assistance Loans. HEAL is a federally insured loan program available to students in the health professions. Currently, all HEAL lenders use a promissory note with a variable interest rate. The rate is reassessed quarterly and is calculated by taking the interest rate on the ninety-one day Treasury Bill plus an additional 3½ percent. Interst on this loan begins to accrue immediately. There is a nine-month grace period after graduation. However, if the borrower becomes an intern or resident in an accredited program before that date, repayment will begin from nine to twelve months after the borrower ceases to be an intern or resident.

P&S Dean's Loan. The Dean's loan fund is a program established by the College to offset the burden of high interest loans to students with a high degree of demonstrated financial need. The interest rate is 9 percent and does not accrue while the student is in school or postgraduate training.

University loan funds are also intended to supplement students' resources when monies are available. Included among these are the following funds:

PETER AMAZON Bequest of Peter Amazon.

LEONARD ALEXANDER ARMS Bequest of Lydia B. Arms, in memory of her husband, to create a revolving loan fund for scholarship and research to medical students and graduate students at P&S.

GEORGE BLUMENTHAL, JR. Used for the assistance of needy students in the medical school.

DR. HARRY BRITENSTOOL MEMORIAL From the estate of Mrs. Blanche B. Ostheimer, in memory of her brother.

CLASS OF 1906 Gifts from various members of the Class of 1906.

CLASS OF 1919 Gifts from various members of the Class of 1919. To be used for loans to deserving students.

CAROL ELISSA GARDNER Established by Dr. M. Jordan Thorstad, in memory of his wife, Dr. Carol Elissa Gardner Thorstad, Class of 1941.

DAVID GREENE A bequest from the estate of Fannye Greene Meyerson, in honor of her brother, Dr. David Greene. Used for assistance of needy students in the medical school and Columbia College.

GEORGE L. HAWKINS, Jr. Gift of George L. Hawkins, Jr., Class of 1941.

B. H. HOMAN, JR., REVOLVING LOAN FUND Long-term, low-interest loans for needy students.

WILLIAM AND ROSE KEYBURTZ SCHOLARSHIP FUND Established by bequest of Dr. Orland L. Keyburtz in honor of his parents.

ROBERT ABBE MACKENZIE Established by friends, colleagues, and patients of Dr. MacKenzie, an alumnus of the Class of 1921.

GEORGE W. MERCK MEMORIAL Established by the Merck Company Foundation in honor of George W. Merck. For graduates of P&S, wherever they are in training, or to graduates of other medical schools in training at hospitals affiliated with the College of Physicians and Surgeons.

HENRY NIAS FOUNDATION LOAN FUND

JESSIE SMITH NOYES

WALTER C. AND MARJORIE C. STEIN Bequest of Marjorie C. Stein.

STEINHARDT MEDICAL SCHOLARSHIP Bequest of Samuel C. Steinhardt. Awarded to graduates of one of the colleges of the City University of New York who have attended public schools exclusively (except for religious instruction). To be repaid in fifteen years; without interest for the first ten years; with 5 percent annual interest thereafter on the unpaid balance.

MRS. AND DR. CLYDE WU, P&S '56 STUDENT LOAN ENDOWMENT

In addition to the foregoing, periodically there are funds for short-term emergency loans, which are administered through the Financial Aid Office of the medical school.

Prizes

Dr. HARRY S. ALTMAN PRIZE Awarded to an outstanding senior student who demonstrates a special interest in pediatric ambulatory care. Established to honor Dr. Harry S. Altman, in recognition of his outstanding contributions to scholarship in pediatrics.

ALUMNI ASSOCIATION AWARD Given for outstanding achievement.

VIRGINIA P. APGAR AWARD Awarded to an outstanding graduate student for excellence in completing an advanced course in anesthesiology and intensive care. Established by the Department of Anesthesiology in honor of Virginia P. Apgar.

MICHAEL H. ARANOW AWARD Awarded to the student who exemplifies the caring and humane qualities of the practicing physician.

HERBERT J. BARTELSTONE AWARD IN PHARMACOLOGY Awarded to a member of the graduating class of the College who has demonstrated exceptional accomplishments in pharmacology. Established to honor the memory of Professor Herbert J. Bartelstone, member of the Department of Pharmacology from 1950 until 1973, dedicated and inspiring teacher, and

uncompromising advocate of the importance of rigorous preparation in basic medical science in the education of the physician.

ALVIN BEHRENS MEMORIAL FUND AWARD of the Phi Lambda Medical Fraternity Given to an able student planning a career in ophthalmology.

COAKLEY MEMORIAL PRIZE Awarded by the Department of Otolaryngology to a senior student who has done outstanding work in the field.

TITUS MUNSON COAN PRIZE Awarded to the senior student who has submitted the best essay in biological science or otherwise best contributed to its advancement. Bequest of Titus M. Coan.

THOMAS F. COCK, M.D., PRIZE Awarded to a senior student for excellence in obstetrics and gynecology.

FREDERICK PARKER GAY MEMORIAL AWARD Awarded to the senior student whose work in microbiology is judged the most outstanding. Given by Mrs. Frederick Parker Gay, in memory of her husband.

LOUIS GIBOFSKY MEMORIAL PRIZE Awarded to a senior student who submits the best research paper in nephrology, dialysis, transplantation, or immunobiology. The award is in memory of Louis Gibofsky.

THE DOCTOR CHARLES E. HAMILTON AWARD Established by Mr. Andrew L. Giffuni to honor Dr. Hamilton, P&S Class of 1918, for excellence in pulmonary diseases.

JANEWAY PRIZE Awarded to the student graduating from the College with the highest marks for efficiency and ability. Given by the bequest of Matilda S. J. Wisner.

Dr. HAROLD LAMPORT BIOMEDICAL RESEARCH PRIZE Awarded to a senior student for the best thesis reporting original biomedical research. Gift of the Lamport Foundation.

JOHN K. LATTIMER PRIZE IN UROLOGY Awarded to senior students for the best essays on urological subjects.

LEMMON COMPANY STUDENT AWARD Given to a graduating student who has excelled in the study of obstetrics and gynecology or family practice.

ROBERT F. LOEB AWARD Awarded to a senior student who, in the opinion of the Department of Medicine, has shown the greatest promise of excellence in clinical medicine. Established in memory of Dr. Robert F. Loeb, Bard Professor of Medicine, and chairman of the Department of Medicine from 1947 to 1959.

F. PHILIP LOWENFISH PRIZE IN DERMATOLOGY Awarded to the individual who has done the most creative and original research in dermatology. Given by Mrs. Lowenfish, in her husband's memory.

ADMIRAL DAVID WILLARD LYON AWARD Awarded to a senior student on a military scholarship for outstanding academic achievement. Established by Dr. Edgar Housepian and Mrs. David Willard Lyon in memory of Admiral Lyon.

DOCTOR CECIL G. MARQUEZ BALSO STUDENT AWARD FOR EXCELLENCE Awarded to a graduating minority medical student for his/her outstanding contribution to the Black and Latin Student Organization and the minority communities.

EDITH AND DENTON McKANE MEMORIAL AWARD Bequest of Edith U. McKane. Awarded to a senior student for excellence in basic or clinical research in ophthalmology.

Dr. HAROLD LEE MEIERHOF MEMORIAL AWARD Awarded on recommendation of the professor of pathology to the student who has done the best work in the field during the four years of medical school. Given by the parents of Dr. Harold Lee Meierhof, Class of 1917.

MARIE NERCESSIAN MEMORIAL AWARD Awarded to a senior medical student (preferably of Armenian descent) who has shown care, unusual concern, and dedication to helping sick people.

NEW YORK ORTHOPEDIC HOSPITAL AWARD An annual prize awarded to a senior student upon nomination by the Department of Orthopedic Surgery, for outstanding performance in the field.

JOSEPH GARRISON PARKER AWARD Awarded to the senior in the College who best exemplifies, through a continued personal interest and activities in art, music, literature, or the public interest, the fact that Living and Learning go on together. Given by Dr. and Mrs. Philip Parker, in memory of their son, Joseph, Class of 1948, whose promising career in medicine was cut short by death in 1953, but in whose life the love of music and the arts was a constant source of inspiration.

P&S CLASS OF 1924, Dr. ALLEN O. WHIPPLE MEMORIAL PRIZE Awarded to a senior student, upon nomination of the Department of Surgery, for outstanding performance in the field.

DEPARTMENT OF PSYCHIATRY PRIZE Awarded by the Department of Psychiatry to a second-year student for the best work in psychopathology.

PUBLIC HEALTH AMBULATORY CARE AWARD Awarded by the School of Public Health to a senior student for an excellent public health project.

SAMUEL W. ROVER AND LEWIS ROVER AWARD IN BIOCHEMISTRY An annual prize to be awarded to a graduating medical student or a male graduate student for scholarship and outstanding achievement in biochemistry at the College of Physicians and Surgeons.

SAMUEL W. ROVER AND LEWIS ROVER AWARD IN PHYSIOLOGY An annual prize to be awarded to a graduating medical student or graduate student for scholarship and outstanding achievement in research in physiology.

ANN RYAN PRIZE IN BIOCHEMISTRY To be awarded to deserving women graduate students.

THE SANDOZ AWARD Awarded to a graduating student for excellence in research.

THE REBECCA A. SCHWARTZ MEMORIAL PRIZE Given by Dr. and Mrs. Stephen Schwartz in memory of their daughter, to be awarded to an outstanding student on a pediatric cardiology elective.

HELEN M. SCIARRA PRIZE Awarded to a senior student in the College for outstanding work in neurology.

THE MIRIAM BERKMAN SPOTNITZ PRIZE Given by Dr. Hyman Spotnitz in memory of Mrs. Spotnitz for outstanding research in the field of oncology.

Dr. ALFRED STEINER AWARD Presented annually to one or more students chosen by a faculty committee on the basis of achievement in medical research. Funded by Harcourt Brace Jovanovich in honor of Dr. Steiner.

Dr. HAROLD B. STEVELMAN AWARD Awarded to a senior student for excellence in adult cardiology. In honor of Dr. Harold Stevelman, Class of 1958, in appreciation of his service to the family of Mr. and Mrs. Leo Gilbert. Gift of Mr. and Mrs. Leo Gilbert.

UPJOHN ACHIEVEMENT AWARD For excellence in research by a graduating student.

Dr. WILLIAM PERRY WATSON PRIZE IN PEDIATRICS Awarded on the nomination of the professor of pediatrics to that member of the graduating class of the College who has shown the most notable work in the study of diseases of infants and children.

Dr. WILLIAM RAYNER WATSON AWARD Awarded to that member of the graduating class who has done the most outstanding work in psychiatry during the four years of attendance at the College of Physicians and Surgeons.

SIGMUND L. WILENS PRIZE Awarded to a member of the graduating class who, in the opinion of the Department of Pathology, has been distinguished by special excellence in pathology. Gift of Dr. Marie Renate Dische Wilens, in memory of her husband, Dr. Sigmund L. Wilens.

Student and Alumni Activities

All students enrolled by the College enjoy the privileges and facilities of the University campus, including the University libraries.

P&S Club

The P&S Club was founded over eighty years ago by John R. Mott, who later won the Nobel Peace Prize. The Club is the most active and comprehensive student organization in American medical education today. All matriculated students in the College of Physicians and Surgeons are members, eligible to participate in extracurricular activities of their choice. Under the guidance of the Faculty Advisory Board, the student cabinet, led by the president, assumes the entire responsibility for management of the Club. The cabinet consists of four elected members from each class and those who chair the following committees: Orientation, Handbook, Student-Faculty Home Visits, Films, Concerts, Choral Society, Bard Hall Players, Outing Club, Winetasters, Athletics, Community Youth Work, Accessories, Social, and Columbia-Presbyterian Medical Society.

Alpha Omega Alpha Honor Medical Society

A chapter of Alpha Omega Alpha, the national honor medical society, was founded at the College of Physicians and Surgeons in 1907. Students are elected to membership in the senior year by a committee of the faculty appointed by the Dean. The committee is chaired by the Alpha Omega Alpha Councilor of the College of Physicians and Surgeons. Student membership is determined according to the constitution of the national society. Election is limited to those whose scholastic qualifications place them in the upper 25 percent of the class. The number of student members elected from any class may not exceed one-sixth of the number expected to graduate in that class. Although scholastic excellence is required for membership, integrity, capacity for leadership, compassion, and fairness in dealing with one's colleagues are judged to be of equal significance.

P&S Alumni Association

The P&S Alumni Association serves to foster and maintain cordial relationships between the College of Physicians and Surgeons and its alumni. Liaison with the College is facilitated through the office of the Assistant Dean for Alumni Affairs.

Regular members of the Alumni Association include all those awarded the M.D. or Med.Sc.D. degrees from the College, as well as all Ph.D. graduates of the basic sciences curricula at P&S and those awarded the Certificate in Psychoanalytic Medicine. Associate members include faculty members of the College, all house staff members and visiting fellows at hospitals affiliated with P&S.

The work of the Alumni Association is accomplished through the efforts of its officers and members of the fifteen standing and *ad hoc* committees, all of whom form the constituency of

the P&S Alumni Council. Among the important functions of the Association is participation in the publication of P&S, a magazine that is cosponsored by the alumni and the medical school and serves as a major form of communication between the school and its alumni, faculty, students and their parents, and other friends and associates of the College.

Restricted revenues raised by the Alumni Association provide funds for scholarships at the College of Physicians and Surgeons. Unrestricted revenues allow the College flexibility in applying funds to areas of greatest need. Traditionally, a substantial stipend from unrestricted revenues goes to the P&S Club as well as to scholarship aid.

As future alumni, students play an important role in the work and deliberations of the Alumni Association. Through their membership on the Student-Alumni Relations Committee, students and alumni work together in addressing students' needs and concerns.

Information about the Alumni Association and its activities is available from the P&S Alumni Relations Office, 2005-C Black Building, 630 West 168th Street, New York, N.Y. 10032. Telephone (212) 305-3498.

The Program of Instruction

The first-year curriculum is largely devoted to basic science courses with correlation clinics to demonstrate the application of scientific information to the practice of medicine. The first-year student also studies the impact of health care systems in our current society on the individual patient and physician. Second-year courses concentrate on the clinical relevance of basic science concepts as the bridging process to clinical instruction begins. Correlations between pathology and pathophysiology are emphasized. The development of basic clinical skills begins in the second semester and culminates in a four-week clerkship. Throughout both preclinical years elective opportunities are available for pursuit of areas of interest.

The major clinical year is devoted exclusively to rotations on clerkships in the clinical disciplines. Under close supervision the students are helped to develop the skills and knowledge required for the practice of clinical medicine. Students learn to elicit a comprehensive history and to carry out a complete physical examination. They learn to develop professional relationships with patients, and they acquire an understanding of the mechanisms of disease and of the principles necessary for valid diagnostic appraisal and effective therapeutic plans.

All courses of the first three years of the curriculum are required of all students. In the fourth year, with the guidance of faculty advisers, students design individual elective curricula, drawn from a wide range of basic scientific electives, clinical electives, and research programs offered by the faculty. Each fourth-year student is required to take a one-month elective in ambulatory care which includes clerkship experience in Public Health/Community Medicine. The elective courses of all departments are described in a catalog which is printed annually and distributed to students and faculty. Students are permitted to spend three months of the curriculum in elective programs offered by other medical schools. In addition, the School of Public Health offers international medicine programs that provide opportunities to study the organization and delivery of health services in many countries of the world.

During the elective curriculum students have available the resources of the entire University. Students are encouraged to utilize elective curriculum time to reach career decisions. Faculty advisers stress the acquisition of knowledge and skills in areas of medicine apart from the student's career discipline, and they encourage students to gain experience in clinical and/or laboratory research.

The College reserves the right to make changes in the program of studies and courses of instruction at any time.

Grades, Promotions, and Leaves of Absence

All courses are rated on an Honors-Pass-Fail system and these ratings only are recorded on the official transcripts. Students are not ranked within the class. Faculty provide narrative descriptions of student performances in preclinical courses (*Abnormal Human Biology, Introduction to the Patient,* and *Psychiatric Medicine I and II*), major clinical year clerkships, and elective programs. These evaluations become part of the student's permanent academic record in the Office of the Dean.

There are three standing faculty committees concerned with students' academic performances. These committees are: The First Year Class Faculty, the Second Year Class Faculty, and the Clinical Committee. The latter deals with academic performances in the major clinical year and the elective curriculum. The standing committees meet during each academic year to review student performances and to make decisions related to course failures and to promotions. Course failures in all years of the curriculum must be corrected according to the directives of the faculty committees. A student may be advanced to the next academic year of the medical school curriculum only upon recommendation of the faculty committee. In any year of the curriculum students may be dismissed for poor scholarship. Repetition of a year of the curriculum may be recommended by a faculty committee. The faculty committees may direct students whose performances are marginal to undertake additional work to correct deficiencies and strengthen overall performance in any discipline.

Students are informed in writing of the academic decisions of all faculty committees. Students have the right to appeal decisions of the faculty committees. A student who wishes to appeal

may request the concerned committee to reverse or alter a decision. If the committee reaffirms the original decision, the student may direct an appeal to the Dean of the Faculty of Medicine, who may refer the appeal to the Executive Committee of the Faculty Council for final decision.

The Faculty of Medicine reserves the right to dismiss, or to deny admission, registration, readmission, or graduation to any student who in the judgment of the Faculty of Medicine is determined to be unsuited for the study or practice of medicine.

Students in the College of Physicians and Surgeons are required to pass National Board Examinations Parts I and II prior to graduation.

Leaves of absence may be granted by the Dean for a limited period of time in exceptional circumstances only for health reasons or personal emergencies.

Key to Course Numbers

Medical Center courses: The suffixes F and S refer to first- and second-year courses, respectively. Numbers without a suffix indicate major clinical year clerkships that are repeated throughout the year in instruction periods of twelve weeks or less.

Summary of Curriculum (for Students Entering in August, 1986)

First Year

AUGUST 25, 1986, to DECEMBER 23, 1986. First semester.

JANUARY 5, 1987, to JUNE 12, 1987. Second semester.

Second Year

AUGUST 26, 1986, through JUNE 5, 1987.

Third and Fourth Years

JUNE 12, 1986, through APRIL 30, 1988.

Basic Science and Introductory Clinical Courses of the First and Second Years

Abnormal Human Biology M6102
Dr. Canfield and interdepartmental associates: Cardiology, Dr. Drusin; Pulmonary, Dr. Caldwell; Endocrinology-Metabolism, Dr. Jacobs; Gastroenterology, Dr. Tall; Hematology, Dr. Bank; Immunology, Dr. Butler; Infectious Diseases, Dr. Neu; Oncology, Dr. Garrett; Nephrology, Dr. Al-Awqati; Surgery, Dr. Lo Gerfo.
Exercises in the application and correlation of the basic sciences to a broad range of clinical problems. Teaching is by seminar/lecture and is closely integrated with courses in pathology, pharmacology, and introductory medicine.

Anatomy M5101. Microscopic anatomy
Dr. Nunez and departmental staff.
Lectures, conferences, and laboratory exercises including light and electron microscopic studies of structure in relation to function.

Anatomy M5102. Human anatomy
Drs. April, Moss, and departmental staff.
Lectures, conferences, and laboratory encompassing basic morphological and functional human anatomy.

Anatomy M5103. Developmental anatomy
Dr. Silverman and departmental staff.
Lectures, demonstrations, and laboratory emphasizing the fundamental processes of embryogenesis; closely integrated with *Anatomy 101F—Microscopic anatomy.*

Biochemistry M5101. Introductory biochemistry
Dr. Gold and departmental staff.
Lectures and conferences stressing principles of biochemistry and their relationship to disease processes.

Genetics M5101. Medical genetics
Dr. Van der Ploeg and associates.
Lectures and clinical presentations emphasizing the practice of clinical genetics and the application of principles of genetics to the medical specialties.

Medicine M6104. Society and medicine
Dr. Rothman and associates.
Lectures and preceptor sessions to explore some of the legal, social, and ethical considerations that structure decision making in medicine.

Medicine M6105. Introduction to the patient
Dr. Charon and associates.
Clinical electives, lectures, and small group discussions introduce the student to the perspective of the patient, teach skills in medical interviewing, and examine the personal elements of the medical encounter.

Medicine M6106. Introduction to the patient clerkship
Dr. Siris and associates.
An intensive four-week clerkship (at Harlem, Overlook, Presbyterian, Roosevelt, or St. Luke's Hospital) during which the student learns to take a comprehensive medical history and perform a complete physical examination.

Microbiology M5101. General microbiology
Dr. Shapiro and departmental staff.
Lectures, conferences, and laboratory covering the basic principles of cell regulation, immunology, virology, and the biology of pathogenic organisms.

Anatomy-Physiology M6106. Neural science
Drs. Castellucci, Kandel, Kelly, Kupfermann, Rowland, and Schwartz.
Lectures, seminars, laboratories, and clinical demonstrations to provide an integrated understanding of neurophysiology, neuroanatomy, biochemistry, and behavior.

Nutrition M5101. Introduction to nutrition
Dr. Winick and associates.
Lectures that define the elements of nutrition essential for good health.

Pathology M6101. Pathology
Drs. Fenoglio, Lefkowitch, Defendini, and departmental staff.
Lectures, conferences, and laboratories emphasizing the mechanisms of injury and repair in cells, tissues, and organ systems. Includes systemic pathology (light and electron microscope studies to elucidate the pathogenesis of findings in diseases) and neuropathology (studies of diseases of the nervous system). *Neuropathology M6106* may be taken as a separate course by graduate students only.

Pharmacology M6101. General and special pharmacology
Dr. Wit and departmental staff.
Lectures, seminars, and demonstrations to elucidate the basic principles essential for the effective use of drugs as therapeutic or diagnostic agents.

Medicine M5101. Physician-patient relationship
Dr. Park and associates.
Preceptor sessions emphasizing the central role of the physician-patient relationship in the practice of medicine and the importance of the effects of health care organization and other factors on that relationship.

Physiology M5101. Human physiology
Dr. Nocenti and departmental staff.
Lectures, demonstrations, and conferences to define the function of specific cells, tissues, and organs and their homeostatic mechanisms.

Psychiatry M5101. Psychiatric medicine, I
Dr. Bernstein and departmental staff.
Lectures and seminars presenting the salient features of normal development.

Psychiatry M6102. Psychiatric medicine, II
Dr. Bernstein and departmental staff.
Lectures and seminars covering the major mental illnesses and the elements of patient interviewing.

Public Health M5101. Structure of health care systems
Dr. Rosenberg and associates.
Lectures and seminar groups on the current organization of health care.

Public Health M5102. Epidemiology
Dr. Paneth and associates.
Lectures and seminars to present epidemiological principles.

Public Health M5103. Biostatistics
Dr. Bodian and associates.
Lectures on the basic elements of biostatistics applicable to medicine.

Public Health M6104. Parasitic diseases
Dr. Despommier and associates.
Lectures and laboratories stressing parasitic diseases likely to be encountered and the techniques necessary for the diagnosis of these diseases.

Major Clinical Year

Anesthesiology M7201. Clinical clerkship in anesthesiology
Dr. Cirello and staff at the Presbyterian Hospital.
A clerkship that provides training in preanesthetic evaluation, management, and postanesthetic care of surgical patients. At the conclusion of the clerkship students should be able to do the following: (1) describe the major factors to be considered in selecting anesthetic drugs and techniques for patients undergoing common surgical procedures; (2) describe indications for positive pressure ventilation of the lungs and how the adequacy of such ventilation can be determined; (3) differentiate between a patent and obstructed airway in a patient and demonstrate on a patient or mannikin his/her ability to obtain a patent airway by positioning; (4) describe the indications for use of an endotracheal tube; (5) describe procedures used for resuscitation of a patient who has had cardiac arrest and demonstrate on a mannikin his/her ability to perform mouth-to-mouth ventilation and closed chest cardiac massage; (6) describe indications for and contraindications to the use of local anesthetics to provide infiltration and nerve block anesthesia; and (7) describe the causes, prevention, diagnosis, and treatment of local anesthetic drug toxicity.

Dermatology M7201.
Dr. Harber and staff.

Medicine M7201. Clinical clerkship in medicine
Dr. Garvey and staff at the Harlem, Presbyterian, Roosevelt, and St. Luke's Hospitals.
Extended clinical experience under a preceptorship system at Presbyterian Hospital and at another affiliated hospital, Harlem, Roosevelt, or St. Luke's Hospital. At the conclusion of the clerkship the student should be capable of taking a precise medical history, performing an accurate physical examination, interpreting basic laboratory data, formulating a cogent problem list, and communicating these data in accurate verbal and written form. These skills will be acquired in the patient care setting in order to increase the student's understanding of the physiologic, psychologic, and social aspects of medicine and to prepare the student for the assumption of clinical responsibility under close supervision.

Neurology M7201. Clinical clerkship in neurology
Dr. Rowland and staff at the Neurological Institute of the Presbyterian Hospital.
A comprehensive experience in clinical neurology provided at the bedside at the Neurological Institute. Under close supervision of a junior and senior resident and an attending physician in neurology, students learn to obtain a systematic neurological history and to perform and interpret the neurological examination. By active participation in the evaluation and care of patients, expertise is obtained in the diagnosis and treatment of common neurological diseases. Students learn how to do a lumbar puncture and they become familiar with electrodiagnostic and neuroradiological tests. Experience is also obtained in neurosurgery and rehabilitation medicine. Management of neurological emergencies is learned during night call with the senior

resident. In addition, a comprehensive core knowledge of clinical neurology is ensured by a course syllabus, daily rounds, and preceptor sessions with the attending physician.

Neurology M7202. Neurosurgery
Dr. Stein and staff at the Neurological Institute of the Presbyterian Hospital.
Included in *Neurology M7201.*

Obstetrics and Gynecology M7201. Clinical clerkship in obstetrics and gynecology
Dr. Margulis and staff at the Harlem, Presbyterian, Roosevelt, and St. Luke's Hospitals.
A comprehensive clerkship in obstetrics and gynecology under close supervision of house staff and attendings. On the gynecological wards and in the clinics the student learns to take a sexual and gynecological history, to examine the breasts, abdomen, and pelvis, to distinguish normal and abnormal findings relative to gynecological disease, and to diagnose and manage benign and malignant gynecologic tumors. The student acquires the skills needed to approach problems of sexuality and an understanding of the impact of changing physiological states in menarche and menopause. On the obstetrical service the student learns the medical and surgical complications encountered during pregnancy and delivery, and the student learns to diagnose and manage pregnancy. The student participates in the conduct of labor, the delivery, and the care of the newborn.

Ophthalmology M7201. Clinical clerkship in ophthalmology
Dr. Campbell and staff.

Orthopedic Surgery M7201. Clinical clerkship in orthopedic surgery
Dr. Dick and staff at the Presbyterian Hospital.
On the orthopedic surgery clerkship students learn to perform an orthopedic physical examination and to take an orthopedic history from a patient. The clerkship provides students with insight into the more common musculoskeletal problems (including fractures and trauma) and the basic approaches to management of these problems by an orthopedic surgeon. The student is expected to gain insight into how the discipline of orthopedic surgery works in conjunction with other specialties and how an orthopedic service provides in-patient and out-patient care.

Otolaryngology M7201. Clinical clerkship in otolaryngology
Dr. Abramson and staff at the Presbyterian Hospital.
A clerkship designed to teach the skills of physical examination of the ear, nose, and throat and to provide an understanding of certain diseases where this examination is crucial in diagnosis and management. The clerkship includes selected didactic lectures, followed by a preceptor-type experience in the clinic where students examine and work up a number of patients under the direct supervision of a faculty member.

Pediatrics M7201. Clinical clerkship in pediatrics
Drs. Katz, Atwood, and staff at the Babies Hospital (Presbyterian), Harlem, Roosevelt, and St. Luke's Hospitals.
A clinical clerkship providing both in-patient and ambulatory care experience. The student is introduced to the study of infants and children: growth and development, diseases, and health care maintenance. The student develops basic skills in the following areas: taking the pediatric history from the parents and from the older child; performing the physical examination of the pediatric patient, including the young infant; observing, analyzing, and recording the interaction between parent and child; and ordering and interpreting laboratory tests. The student learns to integrate the data acquired and formulate an appropriate problem list and plan for the patient. The student also learns to make the basic measurements of physical, neurological, and psychosocial growth and development, and to plot and assess the data.

Psychiatry M7201. Clinical clerkship in psychiatry
Dr. Marcus and staff at the New York State Psychiatric Institute, Harlem, Presbyterian, Roosevelt, and St. Luke's Hospitals.
A comprehensive clerkship in psychiatry. In active participation in patient care under faculty supervision the student is expected to learn to conduct a psychiatric history and mental status examination and to develop refined interviewing skills, noting verbal and nonverbal behavior. The student learns to make a psychiatric differential diagnosis, to use psychotropic drugs effectively, to evaluate suicide potential, and to develop and enhance therapeutic rapport. The clerkship aims to provide an appreciation of the effects of psychological, social, and biological phenomena on illness-related behaviors.

Radiology M7201. Diagnostic radiology (medical)
Dr. Baker and staff.

Radiology M7201. Diagnostic radiology (surgical)
Dr. Baker and staff.

Rehabilitation Medicine M7201.
Dr. Downey and staff at the Neurological Institute of the Presbyterian Hospital.
Included in *Neurology M7201.*

Surgery M7201. Clinical clerkship in surgery
Dr. Reemtsma and staff at the Presbyterian Hospital.
A comprehensive clinical clerkship during which the student is expected to demonstrate improvement in ability to perform histories and physical examinations on surgical patients and to formulate rational diagnostic and therapeutic plans. The student is expected to demonstrate increasing skill and competence in performing selected procedures, in assuming supervised responsibility for patient care, in communicating succinctly and with clarity to patients and colleagues, and in building a functional body of critically examined information regarding common surgical entities.

Surgery M7202. Lectures and demonstrations in surgical pathology
Dr. Reemtsma and staff; Dr. Perzin and staff.
As part of the surgical clinical clerkship (*Surgery M7201*), these three one-and-a-half hour sessions per week describe various selected problems in surgical pathology. The didactic lectures are presented by the surgical "academic senior resident" (PGY5). This resident presents the clinical aspects of various surgical diseases and is assisted by a surgical pathology senior resident, who demonstrates gross specimens and microscopic slides appropriate to the topics and patients being discussed.

Urology M7201. Clinical clerkship in urology
Dr. Olsson and staff.
During the clinical clerkship in urology students learn to identify common disorders of the genito-urinary tract through precise patient interviews and examinations. Both ambulatory and in-patients are evaluated. By knowing diagnostic methods unique to urology, students are able to formulate appropriate diagnostic and therapeutic plans.

Fourth Year

Interdepartment 301. Ambulatory care/public health selective
Dr. C. Ortiz-Neu, course coordinator.
Each student in the fourth year is required to select an elective in ambulatory care, which includes clerkship experience in Public Health/Community Medicine. (For the rest of the Fourth Year see page 45 and the elective catalogue.)

Special Programs

M.D.–Ph.D. Program

This is a cooperative program sponsored by the Graduate School of Arts and Sciences and the College of Physicians and Surgeons for students who have had a strong undergraduate program in science and have a strong commitment to biomedical research. The program allows students to work toward the Ph.D. degree in one of the disciplines listed below in addition to earning the M.D. degree.

Students who participate in the program are admitted to the College of Physicians and Surgeons and to the Graduate School of Arts and Sciences.

Students complete the basic science requirements of the medical program and enter a participating department of the Graduate School to carry out the Ph.D. program. They then complete the balance of the requirements for the M.D. degree.

The participating Ph.D. programs are:

Anatomy and Cell Biology
Biochemistry
Biological Sciences
Chemistry
Epidemiology
Genetics and Development
Statistics
Microbiology
Nutrition
Pathology
Pharmacology
Physiology and Cellular Biophysics
Psychology

For additional information students should write to Dr. David Schachter, Chairman, Graduate Biomedical Sciences Advisory Committee, Department of Physiology, College of Physicians and Surgeons, 630 West 168th Street, New York, N.Y. 10032.

To apply, students should request an application from the College of Physicians and Surgeons. The application form provides instructions for students applying to the M.D.-Ph.D. program.

Joint M.D./M.P.H. Program

This dual degree program is under the joint direction of the College of Physicians and Surgeons and the School of Public Health. In addition to preclinical and clinical medical training, students gain substantive knowledge of the methods and content needed to protect and improve the health of populations and communities. Methods available include those of biostatistics, epidemiology, the social sciences and management. Students choose from content areas including problems of the environment, health care delivery, international health, geriatrics and gerontology, maternal and child health, disease prevention and health promotion or concentrate in methodology. Students are prepared for careers as traditional public health officers or a wide variety of opportunities for research or practice in both the private and public sector of the economy. They develop concrete skills of research or administration applicable in interdisciplinary health service settings, both clinical and community based.

Before being considered for admission to the joint degree program, the applicant must first be accepted as a degree candidate in the College of Physicians and Surgeons. Formal application to the School of Public Health may then be made at any time before the student enters the fourth year of medical training. The overall length of the joint program, registration, and scheduling patterns differ for individual students. The total elapsed time could be as short as four years, but might extend beyond the four-year graduation date of the medical school. In general, during the first three years the joint degree student uses vacation and free time in the medical schedule to cross-register for public health courses. In the fourth year the student registers concurrently in the two schools, permitting opportunities to complete core, track, and elective public health courses and also carry the required clinical elective work in the medical curriculum. The M.D. and the M.P.H. degrees may be awarded simultaneously at the end of the fourth year; either degree may be awarded separately when the requirements have been met.

For further information, consult the Dean's Office in the College of Physicians and Surgeons, 630 West 168th Street, New York, N.Y. 10032, or the Dean's Office in the School of Public Health, 600 West 168th Street, New York, N.Y. 10032.

Integrated M.D.—Oral and Maxillofacial Surgery Program

This program is a cooperative effort of the College of Physicians and Surgeons, the School of Dental and Oral Surgery, and the Presbyterian Hospital. It has been designed to train specialists equipped to handle the expanded scope of maxillofacial surgical practice and to provide academic, research, and clinical leadership in this area. The program combines three and a half years of study for the M.D. degree at the College of Physicians and Surgeons with three and a half years training in oral and maxillofacial surgery and general surgery at Presbyterian Hospital. Candidates must be accepted for admission to both the College of Physicians and Surgeons and the School of Dental and Oral Surgery. Interested candidates should request further information and an application form from Dr. Steven M. Roser, Division of Oral and Maxillofacial Surgery, School of Dental and Oral Surgery, 630 West 168th Street, New York, N.Y. 10032.

Programs in Physical Therapy and Occupational Therapy

Educational programs are offered by the Department of Rehabilitation Medicine to students who have already earned a bachelor's degree. They may apply for admission to a two-year program leading to the Master of Science degree in physical therapy or occupational therapy, or a second professional Master of Science degree in occupational therapy education or occupational therapy administration. Details are given in the bulletin of Programs in Physical Therapy and Occupational Therapy.

Program of the Center for Psychoanalytic Training and Research

A course of training in the theory and practice of psychoanalytic medicine is offered through the Center for Psychoanalytic Training and Research of the Department of Psychiatry. The program, a minimum of four years in length, leads to the award of a certificate in Psychoanalysis. For details, see the bulletin of the Center (formerly the Psychoanalytic Clinic).

Programs in Nutrition

The Master of Science program, administered by the Postgraduate Division of the Faculty of Medicine, is a twelve-month program that serves as a foundation for students who plan to continue for the Doctor of Philosophy degree or to attend a professional school in the health sciences. In addition, the master's program is offered to physicians and other health specialists who wish to augment their training with a knowledge of nutrition.

Requirements for admission: a bachelor's degree from an accredited college, with a strong emphasis on the sciences, including two years of chemistry, one year of biology, and a course in elementary biochemistry. The Graduate Record Examination is required.

In addition a combined M.S./M.P.H. degree in nutrition and public health is offered. This is an eighteen-month program that is designed to prepare individuals for a career in public health nutrition.

Requirements for admission: a bachelor's degree from an accredited college including one year of chemistry and one year of biology. The Graduate Record Examination is required.

Under the jurisdiction of the Executive Committee on Graduate Instruction of the Graduate School of Arts and Sciences, students may follow a program of studies leading to the Ph.D. degree. Course work and thesis research in nutritional biochemistry and in clinical and public health nutrition are carried out under the guidance of the Doctoral Program Subcommittee on Nutrition.

Requirements for admission: successful completion of the Master of Science degree program as outlined above, or the equivalent, and demonstrated scholarly ability in pursuing advanced studies and research. In addition, students must fulfill the general requirements for the degree which govern all Ph.D. candidates in the University.

A program of postdoctoral training in nutrition is offered for qualified individuals having the degree of Doctor of Medicine or the degree of Doctor of Philosophy who intent to pursue careers in teaching and research in nutrition. The program includes clinics, selected nutrition courses, seminars, and participation in research projects, with a view to qualifying the individual for teaching in medical schools or in nutrition departments of graduate schools. Specific training is given in the areas of nutrition and development, prenatal growth, obesity, endocrinology, and nutrition and metabolism. This program has considerable flexibility and is arranged with the individual to suit his or her particular goals and needs.

A separate postdoctoral training program is available for qualified individuals holding either a doctorate in dentistry or a Ph.D. degree who plan to pursue a career teaching in dental schools and doing research related to nutrition and oral health. The program will provide strong, fundamental research training in nutrition, as well as specific exposure and training in each of the areas that nutrition impacts on oral health. The training consists of formal lectures, seminars, laboratory training, clinical research, and, when appropriate, field studies. All candidates are awarded the M.S. degree in nutrition.

Inquiries concerning the above programs may be directed to the Office of the Director, Institute of Human Nutrition, 701 West 168th Street, New York, N.Y. 10032.

Program in Biophysics and Biophysical Chemistry

The program of study in biophysics and biophysical chemistry, which leads to the award of the degree of Doctor of Philosophy, is under the jurisdiction of the Graduate School of Arts and

Sciences. Information about admission and degree requirements and courses of instruction is given in the bulletin of the Graduate School of Arts and Sciences.

Endowed Lectureships and Visiting Professorship

Through the kindness of generous donors, the resources of the Faculty of Medicine include several distinguished lectureships and a visiting professorship:

The *Cartwright Lecture Fund,* established under the will of Benjamin Cartwright, made possible biennial lectures under the sponsorship of the P&S Alumni Association during the period 1881–1912. A new series of Cartwright Lectures was inaugurated under the College's auspices in November 1974.

The *Alexander Ming Fisher Lectures* were established under the terms of the will of Dr. A. M. Fisher's half-brother, E. Douglas Southwick, to make possible lectures on the general theme of Death and Dying.

The *Michael Heidelberger Lectures* were begun in 1955 to honor the notable contributions of Dr. Heidelberger, now Professor Emeritus of Immunochemistry, and to stimulate further scientific progress in immunochemistry and related disciplines.

The *Ludwig Schaefer Visiting Professorship* was established by the bequest of the late Ludwig Schaefer to encourage and promote research work in the sciences of human physiology. It provides for the appointment of a visiting professor for six months, from parts of the world other than North and South America.

The *David Seegal Lectureship and Visiting Professorship Fund*, given by the Alpha Omega Alpha Honor Medical Society and others, provides for the appointment of a visiting professor who is in residence for five days. During this time he or she delivers the David Seegal Lecture on Chronic Disease.

Prizes and Awards

The *Distinguished Service Award* of the College of Physicians and Surgeons is given annually at Commencement exercises to a member of the faculty for outstanding contributions to medicine.

The *Louisa Gross Horwitz Prize,* the recipient of which traditionally gives a public lecture, was established under the will of the late S. Gross Horwitz in honor of his mother and is given annually in recognition of outstanding basic research in the fields of biology or biochemistry.

The *Dr. Harold and Golden Lamport Research Awards* were initiated in 1983 to recognize outstanding young researchers in basic science and in clinical science.

The *Joseph Mather Smith Prize* is awarded to the graduate of the College whose original research in medical subjects is deemed by the Dean's Advisory Committee on Honors and Awards to be the most meritorious.

The *Stevens Triennial Prize* is awarded to the person, not necessarily a graduate of the College, whose original research on any medical subject is deemed by the Dean's Advisory Committee on Honors and Awards to be the most meritorious.

The *Dean's Award for Outstanding Contributions to Teaching* was inaugurated in the mid-1970s as an appropriate way to recognize faculty members who are notably effective as teachers or leaders in education.

Postgraduate Programs

Opportunities for continuing medical education beyond the M.D. degree are offered at the College of Physicians and Surgeons through three major programs: (1) the training of specialists by means of hospital residencies; (2) special courses in general medicine and in the specialties, for practicing physicians and physicians in training who wish to renew and continue their educational experiences in the various fields of medicine; and (3) the Doctor of Medical Science Program, for physicians with particular interest and competence in research in the basic sciences. Further information about these programs may be obtained from the Office of the Dean of the Faculty of Medicine.

Graduate Training of Specialists

The program offers training opportunities through fellowships at the College of Physicians and Surgeons and residencies at affiliated hospitals for holders of the M.D. degree. Proper training for specialization includes four major elements. First, it provides a comprehensive clinical experience as a resident in the hospital that is equipped and staffed to provide graded responsibilities under the supervision of experts in the selected specialty. Second, it disciplines the resident in scientific attitudes toward health and disease and enriches the clinical experience through advanced training in those medical sciences that are largely concerned with the resident's specialty. Third, it enables the resident to see and to begin to understand the effect of illness on the individual patient and the response of that person to the illness and to the physician. The relationships that the resident physician develops with individual patients set the pattern for his or her participation in the delivery of health care after the completion of the residency. Finally, it gives the student the opportunity, either as a resident or as a fellow, to do basic or clinical research. This, in turn, may stimulate the type of creative productivity that may earn the student a recommendation for admission to a program leading to the award of the Doctor of Medical Science degree.

Postgraduate Courses for Practicing Physicians and Specialists

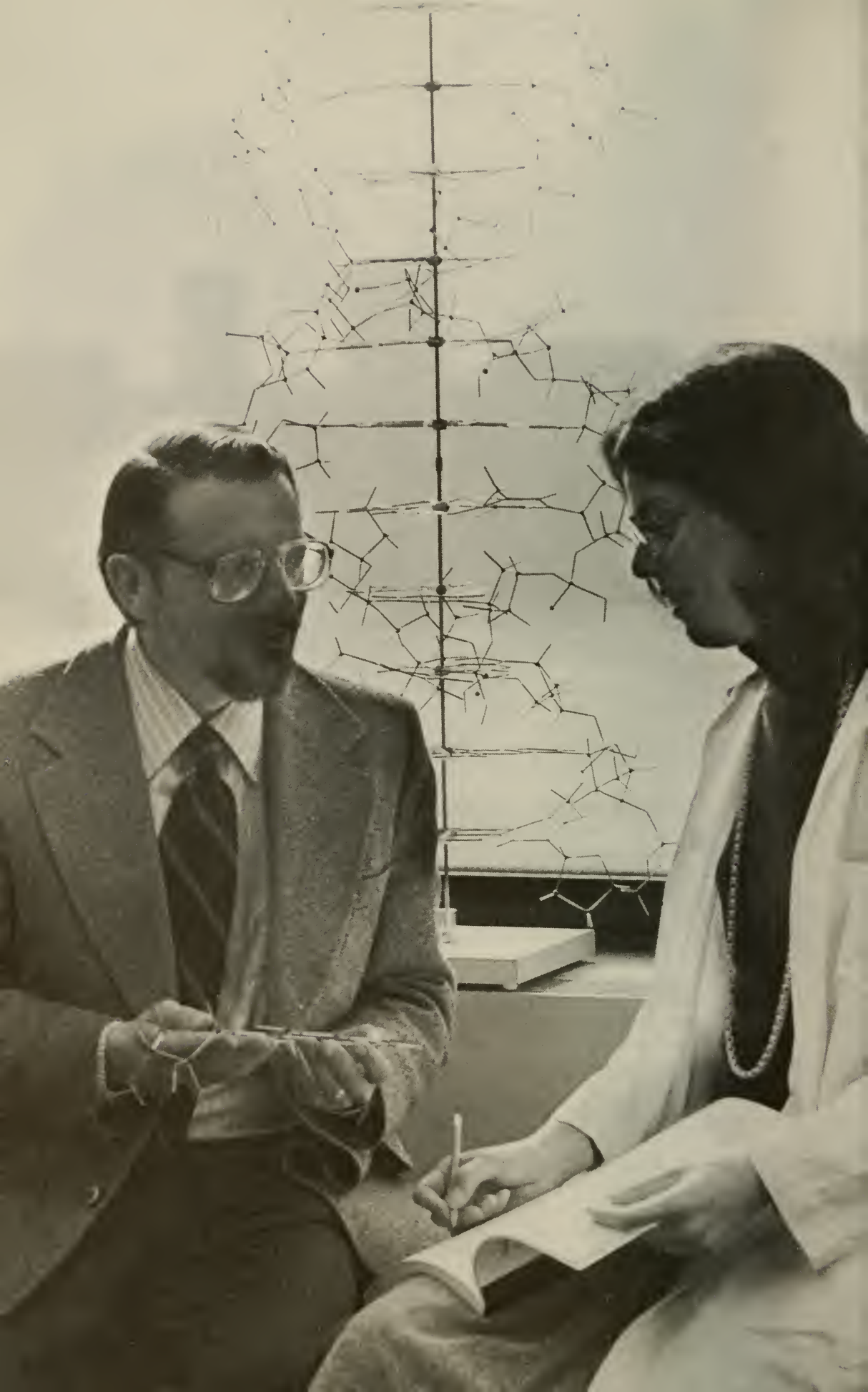
A variety of short courses have been organized at hospitals and clinics affiliated with the University; they are available at the Columbia-Presbyterian Medical Center and at the other affiliated hospitals. No University credit or certificates are granted for these courses, but continuing medical education credit is granted through the Physicians Recognition Award of the American Medical Association.

Courses for the general practitioner furnish opportunities to keep abreast of new knowledge and the latest methods of diagnosis, treatment, and prevention; and to learn the indications, limitations, and value of those technical procedures that require the attention of a qualified specialist. The instruction consists largely of first-hand clinical experience, lectures, demonstrations, and discussion.

For those already practicing a specialty, advanced instruction is given in the therapeutic and diagnostic methods of certain limited fields of practice. Enrollment is limited to those who have the preparation necessary to enable them to benefit by the advanced instruction.

Program for the Doctor of Medical Science Degree

The University confers the Med.Sc.D. degree upon a few physicians who have completed a research project in one of the basic science fields. Only staff members of the Columbia-Presbyterian Medical Center are eligible for this degree. A minimum of two years of full-time work in the basic science field is required. Additional requirements include completion of a significant and original research project, the passing of comprehensive and oral examinations, and submission of a dissertation.



Departments of Instruction

Listed are faculty appointments as of July 1, 1986.

The designation "also" indicates that the faculty member holds appointments in two departments. The designation "in" is used when an individual holds an appointment in the department where listed, with assignment to the department named after the "in."

Anatomy and Cell Biology

Professor and Chairman

Michael D. Gershon. *B.A., Cornell, 1958; M.D., 1963*

Professors

Anthony Bellve (in Urology and the International Institute of Human Reproduction). *B.Ag.Sci., Massey (New Zealand), 1964; M.Ag.Sc., 1967; Ph.D., North Carolina State, 1970*
Melvin L. Moss. *B.A., New York University, 1942; D.D.S., Columbia, 1946; Ph.D., 1954*
Eladio A. Nunez. *B.S., St. John's (New York), 1951; M.S., 1953; Ph.D., New York University, 1964*
Virginia M. Tennyson (also Pathology). *B.S., Pennsylvania State, 1946; M.S., Baylor, 1956; Ph.D., Columbia, 1960*

Adjunct Professors

Manfred Otto Nahmmacher. *Ph.D., Giessen (Germany), 1960*
Samuel Rosner. *M.D., Royal College of Physicians and Surgeons (Edinburgh), 1940; F.I.C.S., 1951*

Associate Professors

Richard T. Ambron. *B.S., Villanova, 1965; Ph.D., Temple, 1971*
Ernest W. April. *B.S., Tufts, 1961; Ph.D., Columbia, 1969*
Philip W. Brandt. *B.A., Swarthmore, 1952; M.S., Pennsylvania, 1957; Ph.D., Columbia, 1960*
Stephen B. Doty (in Orthopedic Surgery). *B.A., Rice, 1961; M.A., 1963; Ph.D., 1965*
Richard H. Kessin. *B.A., Yale, 1966; Ph.D., Brandeis, 1971*
Ann-Judith Silverman. *B.A., California (Los Angeles), 1967; Ph.D., 1970*

Adjunct Associate Professor

Richard M. Hoar. *B.A., Dartmouth, 1950; Ph.D., Kansas, 1956*

Associate Professor of Clinical Pathology

Dominique Toran-Allerand (also Neurology) (in International Institute for the Study of Human Reproduction). *B.A., Smith, 1955; M.D., Albany Medical College, 1959*

Assistant Professors

John E. Bergmann. *B.S., Massachusetts Institute of Technology, 1972; Ph.D., 1979*
Sharon C. Colacino. *B.A., St. Catherine (Minnesota), 1961; Ph.D., Wisconsin, 1969*
Christopher A. Gabel. *B.S., Iowa State, 1985; Ph.D., Washington (Seattle), 1979*
Masataka Kawai. *B.A., Tokyo, 1966; Ph.D., Princeton, 1971*
John E. Pintar. *B.A., Case Western Reserve, 1970; Ph.D., Oregon, 1977*
Lorna Role. *B.A., Harvard, 1975; Ph.D., 1981*
Taube Pearl Rothman. *B.A., City College, 1969; Ph.D., Cornell, 1975*
Larry D. Witte (in Medicine). *B.S., Iowa State, 1970; Ph.D., 1974*

Adjunct Assistant Professors

Craig H. Bailey (in Psychiatry and the Center for Neurobiology and Behavior). *B.A., Lehigh, 1967; M.S., 1969; Ph.D., 1973*
Ian Blair Fries. *B.A., Columbia, 1964; M.D., 1968*
Samuel M. Schacher (in Psychiatry and the Center for Neurobiology and Behavior). *B.S., Columbia, 1971; M.A., 1974; Ph.D., 1976*
Klaudiusz R. Weiss (in Psychiatry and the Center for Neurobiology and Behavior). *M.A., Warsaw, 1967; Ph.D., State University of New York (Stony Brook), 1973*

Associate Research Scientists

Theresa A. Brancheck. *B.A., Cornell, 1975; Ph.D., Oregon, 1981*
Halina D. Den (in Neurology). *B.S., Frankfort, 1949; M.S., New York University, 1954; Ph.D., Michigan, 1958*
Robert F. Payette. *B.A., Providence College, 1969; M.D., Pennsylvania, 1974*
Tuan Dhuc Pham (also Pharmacology). *B.S., St. Edward's (Texas), 1962; M.S., Loyola, 1967; M.Phil., Ph.D., Columbia, 1975*
Joan Wharton Witkin. *M.A., Columbia, 1975; Ph.D., 1981*

Adjunct Associate Research Scientist

James P. Kelly. *B.A., Harpur, 1966; Ph.D., Washington (St. Louis), 1971*

SPECIAL LECTURER
Charles A. Ely, Ph.D.

Anesthesiology

Associate Professor and Acting Chairman

Allen I. Hyman (also Pediatrics). *B.A., Columbia, 1955; M.D., Albany Medical College, 1959*

At Presbyterian Hospital

Professors

Henrick H. Bendixen (Emmanuel M. Papper Professor). *M.D., Copenhagen, 1951*
Mieczyslaw Finster (also Obstetrics and Gynecology). *B.A., Gymnasium (Poland), 1941; M.D., Geneva, 1957*
Gabriel G. Nahas. *M.D., Toulouse, 1944; Ph.D., Minnesota, 1953*
Shih-Hsun Nagi (also Pharmacology). *M.B., National Central (Nanking), 1944*
Eugene J. Pantuck. *B.S., Tufts, 1959; M.D., 1963*
Lubos Triner. *M.D., Charles (Prague), 1955; Ph.D., 1961*

Adjunct Professor

Sidney Spector (also Pharmacology). *B.S., Denver, 1948; M.S., 1950; Ph.D., Jefferson, 1956*

Professors of Clinical Anesthesiology

Leonard Brand. *B.S., Yale, 1946; M.D., Columbia, 1949*
Edgar C. Hanks. *B.A., Gettysburg, 1943; M.D., Jefferson, 1947*

Associate Professors

Arthur D. Finck. *B.S., Lafayette, 1968; M.D., Columbia, 1972*
Hisayo O. Morishima. *M.D., Toho (Tokyo), 1951; Ph.D., Tokyo, 1959*

Leila M. Pang (also Pediatrics). *B.A., Hawaii, 1966; M.D., State University of New York (Downstate), 1970*
Peter T. Rothstein. *B.A., Brandeis, 1966; M.D., Albert Einstein, 1970*
J. Gilbert Stone. *B.A., Dartmouth, 1960; M.D., State University of New York (Downstate), 1964*

Associate Professors of Clinical Anesthesiology

Hoshang Jal Khambatta. *M.D., Karachi, 1958*
Richard S. Matteo. *B.A., Syracuse, 1950; M.D., State University of New York (Upstate), 1955*
Hilda Pedersen. *M.B., Ch.B., Edinburgh, 1958*
Stanley H. Rosenbaum (also Medicine). *B.A., Columbia, 1967; M.A., Harvard, 1969; M.D., Cornell, 1973*

Associate Professors of Clinical Engineering

Alvin Wald. *B.E.E., Cooper Union, 1955; M.E.E., Polytechnic Institute, 1961; Ph.D., New York University, 1974*

Associate Clinical Professors

Keith J. Bernstein. *B.A., New York University, 1968; M.D., State University of New York (Downstate), 1974*
Donald C. Brody. *B.A., Harvard, 1952; M.D., Boston, 1956*
Kevin B. Sanborn. *B.S., Manhattan, 1969; M.D., New York University, 1973*
Jen-Tieng Wung. *M.D., Taipei Medical College, 1956*

Research Scientist

Salha S. Daniel. *B.S., London, 1954; Ph.D., 1957*

Assistant Professors

Jeffrey Askanazi. *B.S., Worcester Polytechnic Institute, 1971; M.D., State University of New York (Syracuse), 1975*
Samuel M. Barst. *B.S., Haverford, 1974; M.D., Temple, 1979*
Donald G. Bluh. *B.A., Columbia, 1973; M.S., Stanford, 1975; M.D., Columbia, 1980*
Arvin H. Chin. *B.S., Cornell, 1970; M.D., 1974; J.D., Columbia, 1981*
Michael C. Damask. *B.A., Case Western, 1970; M.D., Chicago Medical School, 1974*
Stephanie Duberman. *B.S., City College of New York, 1970; M.D., State University of New York (Downstate), 1974; M.P.H., Columbia, 1980*
Ingrid Anne-Marie Fitz-James. *B.A., Sarah Lawrence, 1973; M.D., Columbia, 1977*
Geordie P. Grant. *B.S., College of William and Mary, 1968; M.D., New Jersey College of Medicine and Dentistry, 1978*
Laurence P. Mark. *B.S., Harvey Mudd, 1975; M.D., Columbia, 1979*
Pat J. Martin. *B.S., Columbia, 1970; M.D., 1974*
Samantha Mullis. *B.S., Michigan State, 1975; M.D., 1979*
Eugene Ornstein. *M.S., Polytechnic Institute of Brooklyn, 1973; Ph.D., 1977; M.D., Miami (Florida), 1979*
Richard K. Raker. *B.A., Michigan, 1969; M.D., 1973*
Howard L. Rosner. *B.S., Miami, 1977; M.D., 1980*
Peter Salgo. *B.A., Columbia, 1971; M.D., 1975*
Alan C. Santos. *B.S., Marquette, 1974; M.D., New York Medical College, 1979*
Charles Weissman. *B.A., Yeshiva, 1972; M.D., State University of New York (Downstate), 1976*
William L. Young. *B.A., Indiana, 1976; M.D., New Jersey Medical College, 1979*
Victor M. Zayas. *B.S., Stevens Institute of Technology, 1974; M.D., New Jersey Medical College, 1970*

Adjunct Assistant Professor

Michael Rothkopf. *BN.A., Syracuse, 1975; M.D., Eastern Virginia Medical School, 1979*

Assistant Professors of Clinical Anesthesiology

Dorothy A. Black. *B.A., Rutgers, 1957; M.A., Columbia, 1959; M.D., Harvard, 1965*
Kathryn A. W. Cozine. *M.D., Johns Hopkins, 1961*
Ellise S. Delphin. *B.A., Barnard, 1971; M.D., Columbia, 1975*
Alber Faltas. *M.D., Kasr-El-Ainy Medical School (Egypt), 1961; University, 1973*
Carolyn P. Greenberg. *B.A., Stanford, 1962; M.D., California (San Francisco), 1966*
John W. Hennessey. *B.S., Massachusetts, 1961; M.D., Tufts, 1966*
Ina Lieberman. *B.A., Barnard, 1964; M.D., New York University, 1968*
Gerald S. Weinberger. *M.D., New York University, 1948*
Sook Young Woo. *Ewha Women's University (Seoul), 1968; M.D., 1972*
Joseph Chuan-Shih Yang. *B.S., Taiwan, 1959; M.D., Medical Academy (Dusseldorf), 1964*

Assistant Professor of Clinical Psychology

Robert Dworkin. *B.A., Pennsylvania, 1971; Ph.D., Harvard, 1977*

Assistant Clinical Professor

M. Alice Becker. *B.S., Mount St. Vincent, 1966; Ph.D., New York University, 1972; M.D., Columbia, 1979*

Associate Research Scientists

Karen M. Gil. *B.S., Tufts, 1977; M.S., Massachusetts, 1981; Ph.D., 1983*
Yvonne Vulliemoz. *M.S., Lausanne, 1958; Ph.D., Paris, 1969*

INSTRUCTORS
Sandra Curry, M.D.
Douglas S. T. Green, M.D.

INSTRUCTOR IN CLINICAL ANESTHESIOLOGY
Vincent N. Cirella, M.D.

At Mary Imogene Bassett Hospital

Associate Clinical Professor

Andrew L. Rauscher. *M.B., London, 1963; M.B.B.S., University College Hospital, 1966*

Assistant Clinical Professor

Edward Palmer. *B.A., Dartmouth, 1967; M.D., Cornell, 1971*

At Harlem Hospital

Assistant Professor

Gilbert Phanor. *B.S., Lycee T. Gilboro, 1953; M.D., Medical School of Haiti, 1960*

Assistant Professors of Clinical Anesthesiology

Yvetot Antoine. *M.D., State University of Haiti, 1962*
Mita Dhruvkumar Gunderia. *B.S., Wilson College (Bombay), 1970; M.D., Grant (Bombay), 1976*
Archibald K. Hinds. *B.A., College of the City of New York, 1952; M.D., Montpellier, 1962*
Jung Kie Park. *B.S., Soyang (Seoul), 1972; M.D., Han Yang (Seoul), 1977*
Madisetti Swamy. *M.B., B.S., Osmania (India), 1954*
J. Sinclair Trimiar. *B.S., Howard, 1960; D.D.S., 1964*

Assistant Clinical Professors

Clarissa P. Carino. *B.S., Far Eastern (Manila), 1966; M.D., 1968*
Ronald Rahman. *B.A., Rutgers, 1974; M.D., Pennsylvania, 1978*
George S. Szreniawski. *M.D., Warsaw Medical Academy, 1967*
Sidney O. Veitch. *M.B.B.S., West Indies, 1968*

SPECIAL LECTURER
Samuel C. Brisbane, M.D.

At Overlook Hospital

Assistant Clinical Professors

John Rocco Calabro. *B.S., Manhattan, 1971; M.D., New Jersey College of Medicine and Dentistry, 1975*
Henry A. Connolly, Jr. *B.S., Fordham, 1951; M.D., Hamburg, 1955*
Demetrios B. Kalas. *M.D., Aristotelian, 1954*
Mary Louise White. *B.S., Maryland, 1943; M.D., 1945*

INSTRUCTORS IN CLINICAL ANESTHESIOLOGY
Sami A. M. Abadir, M.D.
Jane DeV. Stark, M.D.

At St. Luke's–Roosevelt Hospital

Associate Professor

Louise Blancato. *B.S., Fordham, 1942; M.D., New York Medical College, 1945*

Assistant Professors of Clinical Anesthesiology

Enzio Gallozzi. *M.D., Rome, 1953*
Joseph Iacovelli. *B.A., Buffalo, 1952; M.D., Bologna, 1958*

Assistant Clinical Professor

Ronald A. Andree. *B.A., Miami (Ohio), 1955; M.D., Case Western Reserve, 1959*

ASSOCIATES IN CLINICAL ANESTHESIOLOGY
Gugliemina Bettini, M.D.
Hilda S. Liu, M.D.
Alfred T. C. Peng, M.D.
Altagracia H. Polanco, M.D.

INSTRUCTORS IN CLINICAL ANESTHESIOLOGY
Sheldon H. Deluty, M.D.
Julio M. Garcia Rodriguez, M.D.
Dilber Hussain, M.D.
Zdan J. Korduba, M.D.
Han Chiang Lee, M.D.
Ignacio U. Ngo, M.D.
Kyaw Nyunt, M.B., B.S.
Nirmal Patel, M.D.
Michael Bruce Putter, M.D.

INSTRUCTORS *(continued)*
Kenneth A. Rothenberg, M.D.
Kristappa Sangavaram, M.D.

Biochemistry and Molecular Biophysics

Robert Wood Johnson Jr. Professor and Chairman

Isidore S. Edelman. *B.A., Indiana, 1941; M.D., 1944*

Professors

Frederick W. Alt. *B.S., Brandeis, 1971; Ph.D., Stanford, 1978*
Richard Axel (also Pathology). *B.A., Columbia, 1967; M.D., Johns Hopkins, 1970*
Reinhold Benesch. *B.Sc., Leeds, 1941; M.Sc., 1945; Ph.D., Northwestern, 1950*
Ruth E. Benesch. *B.Sc., London, 1946; Ph.D., Northwestern, 1951*
Max A. Eisenberg. *B.A., Brooklyn, 1938; M.S., New York University, 1941; Ph.D., Duke, 1950*
Philip Feigelson. *B.S., Queens, 1947; Ph.D., Wisconsin, 1951*
Stephen Goff. *B.A., Amherst, 1973; Ph.D., Stanford, 1978*
Robert F. Goldberger. *M.D., New York University, 1958*
Maxwell Gottesman (Charles Revson Professor) (also Microbiology) (in the Institute of Cancer Research). *M.D., Yale, 1960; Ph.D., 1965*
Wayne Hendrickson. *Ph.D., Johns Hopkins, 1968*
Barry Honig. *B.Sc., Polytechnic Institute (Brooklyn), 1963; M.A., Johns Hopkins, 1964; Ph.D., Weizmann Institute (Israel)*
Alvin I. Krasna. *B.A., Yeshiva, 1950; Ph.D., Columbia, 1955*
Barbara W. Low. *B.A., Oxford, 1942; M.A., 1946; D.Phil, 1948*
Dinshaw Patel. *Ph.D., New York University, 1966*
Maurice M. Rapport (in Psychiatry). *B.S., College of the City of New York, 1940; Ph.D., California Institute of Technology, 1946*
Parithychery Srinivasan. *B.Sc., Madras, 1946; Ph.D., 1953*

Adjunct Professor

Benno P. Schoenborn. *B.A., California (Los Angeles), 1958; Ph.D., New South Wales (Australia), 1962*

Associate Professors

Roger M. Burnett. *B.Sc., The Polytechnic (London), 1964; Ph.D., Purdue, 1970*
Kurt Drickamer. *B.S., Stanford, 1973; Ph.D., Harvard, 1978*
Allen M. Gold. *B.A., Chicago, 1950; Ph.D., Harvard, 1955*
Thomas Jessel. *B.Pharm, London, 1973; M.P.S., London Hospital, 1974; Ph.D., Cambridge, 1977*
Bonnie Ann Wallace. *Ph.D., Yale, 1977*

Adjunct Associate Professor

John D. Karkas. *Ph.D., Columbia, 1962*

Assistant Professors

Mitchell Goldfarb. *Ph.D., Massachusetts Institute of Technology, 1979*
Lee Makowski. *B.S., Brown, 1971; M.S., Massachusetts Institute of Technology, 1973; Ph.D., 1976*
James L. Roberts (in International Institute for Study of Human Reproduction). *B.S., Colorado State, 1973; Ph.D., Oregon, 1977*

Adjunct Research Scientist

Barry Potvin. *B.A., Brandeis, 1968; Ph.D., North Carolina, 1973*

Associate Research Scientists

Gregory George Gick. *Ph.D., Duke, 1981*
Jade Li. *Ph.D., Harvard, 1978*
Sahebarao Mahadik (in Psychiatry). *Ph.D., Poona (India), 1969*
Robert McDaniel. *B.S., State University of New York (Albany), 1972; M.S., Northwestern, 1978; Ph.D., Duke, 1982*
Thomas Pressley. *Ph.D., Medical University of South Carolina, 1981*
James J. Russo. *B.S., St. John's (New York), 1974; M.S., New York University, 1977; Ph.D., 1981*
Janet L. Smith. *Ph.D., Wisconsin (Madison), 1978*
Eftihia Tzilianos. *M.Sc., Witwatersrand, 1968; Ph.D., 1972*
Michael G. Zagorski. *B.S., State University of New York (Oneonta), 1977; Ph.D., Case Western Reserve, 1982*

SPECIAL LECTURERS
Erwin Chargaff, Ph.D.
Zacharias Dische, M.D. (in Ophthalmology)
David B. Sprinson, Ph.D.

At Mary Imogene Bassett Hospital

Adjunct Associate Professors

Theodore Peters, Jr. *B.S., Lehigh, 1943; Ph.D., Harvard, 1950*

At St. Luke's–Roosevelt Hospital Center

Associate Research Scientists

Utapalendu S. Maitra. *M.S., Calcutta, 1963; Ph.D., 1971*
Venkitachalem P. Mohan. *B.Sc., Kerala (India), 1969; M.Sc., 1971; Ph.D., Indian Institute of Science, 1977*

Dermatology

Richard and Mildred Rhodebeck Professor and Chairman

Leonard C. Harber. *B.A., Johns Hopkins, 1949; M.D., New York University, 1953*

At Presbyterian Hospital

Clinical Professor

Saul L. Sanders. *B.A., Kenyon, 1950; M.D., Cornell, 1952*

Associate Professor of Clinical Dermatology

Maureen B. Poh. *B.S., Siena, 1964; M.D., Tennessee, 1967*

Associate Clinical Professors

Jack Eisert. *B.A., Cornell, 1952; M.D., State University of New York (Downstate), 1956*
Marc E. Grossman. *B.A., State University of New York (Buffalo), 1970; M.D., Pennsylvania, 1974*
David N. Silvers (also Pathology). *B.A., Haverford, 1964; M.D., Duke, 1968*
Robert R. Walther. *B.A., Cornell, 1969; M.D., North Carolina, 1973*
Richard L. Walzer. *B.A., Harvard, 1952; M.D., Columbia, 1956*

Assistant Professor

Vincent De Leo. *B.S., Lousiana State, 1965; M.D., 1969*

Assistant Clinical Professors

Irving Abrahams. *B.A., New York University, 1948; M.D., State University of New York (Downstate), 1954*
Alan D. Andrews. *B.S., Illinois, 1968; M.D., Virginia, 1972*
Robert B. Armstrong. *B.A., Haverford, 1969; M.D., Columbia, 1973*
Vincent S. Beltrani. *B.A., Brooklyn, 1953; M.D., Columbia, 1957*
Yehuda D. Eliezri. *B.A., Brooklyn, 1966; M.S., Yeshiva, 1971; M.D., Western Ontario, 1976*
Eric W. Herman. *B.A., Buffalo, 1972; M.D., Mt. Sinai, 1976*
Einar A. Juhlin. *B.S., Illinois, 1950; M.D., Royal Charles (Sweden), 1957*
Steven R. Kohn. *B.A., Rutgers, 1964; M.D., Boston, 1968*
Theodore A. Labow. *B.S., Miami, 1951; M.D., Tufts, 1955*
Asher D. Rabinowitz. *B.A., Yeshiva, 1970; M.D., George Washington, 1974*
Jack H. Rozen. *B.S., Pittsburgh, 1958; M.D., 1962*
Paul Ira Schneiderman. *B.S., Wisconsin, 1967; M.D., State University of New York (Syracuse), 1971*

Associate Research Scientist

Francis P. Gasparro. *B.S., Villanova, 1966; Ph.D., Princeton, 1971*

SPECIAL LECTURERS
Leslie P. Barker, M.D.
Margarita S. Hutner, Ph.D.
J. Lowry Miller, M.D.

LECTURERS
Richard L. Edelson, M.D.
Robert Knobler, M.D.

ASSOCIATES IN CLINICAL DERMATOLOGY
William G. Atwood, M.D.
Robert P. Feinstein, M.D.
Eugene W. Sweeney, M.D.
Harvey I. Weinberg, M.D.

INSTRUCTORS IN CLINICAL DERMATOLOGY
Robert M. Bernstein, M.D.
Stephen Anthony Billstein, M.D.
Timothy J. Corey, M.D.
Leon K. Demar, M.D.
Jeffrey S. Kezis, M.D.
Joseph A. Penner, M.D.
Douglas Pravda, M.D.
Kass Sadri, M.D.
Robert S. Seibt, M.D.
Luis A. Suarez, M.D.
E. George Thorne, M.D.

At St. Luke's–Roosevelt Hospital Center

Clinical Professor

Alexander W. Young, Jr. *B.S., Maryland, 1944; M.D., 1946*

Assistant Clinical Professors

William P. De Pietro. *B.S., Massachusetts Institute of Technology, 1972; M.D., Georgetown, 1976*
Herbert H. Hochman. *B.A., Columbia, 1966; M.D., Tulane, 1970*
Peter C. Lombardo. *B.S., Rochester, 1955; M.D., Albany, 1959*
David Sibulkin. *B.A., New York University, 1962; M.D., 1966*
Gregory Zalar. *B.S., George Washington, 1965; M.D., 1969*

INSTRUCTORS IN CLINICAL DERMATOLOGY
Elaine V. DiGrande, M.D.
Stanley J. Lewis, M.D.

Genetics and Development

Professor and Chairman

Charles R. Cantor. *B.A., Columbia, 1963; Ph.D., California (Berkeley), 1963*

Professors

Kimball C. Atwood. *B.A., Columbia, 1942; M.D., New York University, 1946*
Arthur Bank (also Medicine). *B.A., Columbia, 1956; M.D., 1960*
Arthur D. Bloom (also Pediatrics). *B.A., Harvard, 1956; M.D., New York University, 1960*
Argiris Efstratiadis. *Dr.Med.Sci., Athens (Greece), 1971; M.D., 1966; Ph.D., Harvard, 1976*
Georgiana Jagiello (also Virgil Damon Professor of Obstetrics and Gynecology). *B.A., Boston, 1949; M.D., Tufts, 1955*
Elvin A. Kabat (also Microbiology) (in Neurology). *B.S., College of the City of New York, 1932; M.A., Columbia, 1934; Ph.D., 1937*
Orlando J. Miller (also Obstetrics and Gynecology). *B.S., Yale, 1945; M.D., 1950*

Adjunct Professor

Ronald H. Kaback. *B.A., Haverford, 1958; M.D., Albert Einstein College of Medicine, 1962*

Professors of Clinical Psychiatry

L. Erlenmyer-Kimling. *B.S., Columbia, 1957; Ph.D., 1960*
John D. Rainer. *B.A., Columbia, 1941; M.A., 1944; M.D., 1951*

Associate Professor of Clinical Pediatrics

Dorothy Warburton. *B.S., McGill, 1957; Ph.D., 1961*

Adjunct Associate Professors

Michael Ian Sherman. *B.Sc., McGill, 1965; Ph.D., State University of New York (Stony Brook), 1969*
David Webb. *B.A., California State, 1966; M.A., 1968; Ph.D., Rutgers, 1971*

Research Scientists

Harold Calvin (in Center for Reproductive Biology). *B.A., Columbia, 1957; Ph.D., 1964*
Fred R. Kramer. *B.S., Michigan, 1964; Ph.D., Rockefeller, 1969*
Donald Mills. *M.A., Indiana, 1964; Ph.D., Illinois, 1968*

Assistant Professors

Jurgen Brosius. *B.A., Johann Wolfgang Goethe (Frankfort), 1974; Ph.D., Max-Planck Institut, 1976*
Frank Costantini. *B.S., Yale, 1974; Ph.D., California Institute of Technology, 1980*
Rodney J. Rothstein. *B.S., Illinois, 1969; Ph.D., Chicago, 1975*
Leonardus Van der Ploeg. *B.S., Amsterdam, 1980; Ph.D., 1984*
Debra Wolgemuth (in the Cancer Research Center). *B.A., Gettysburg, 1969; M.A., Vanderbilt, 1971; M. Phil., Columbia, 1975; Ph.D., 1977*

Assistant Professor of Clinical Human Genetics and Development

Marian B. Carlson. *B.A., Radcliffe, 1973; Ph.D., Stanford, 1978*

Associate Research Scientists

Carl S. Dobkin. *B.A., Wisconsin, 1969; Ph.D., Columbia, 1978*
Jye-Siung Fang. *B.S., National Taiwan, 1962; Ph.D., Kansas State, 1971*
Harlow K. Fischman. *B.A., Brooklyn, 1955; M.S., Arkansas, 1960; Ph.D., New York University, 1968*
Wilma A. Saffran. *B.S., Wisconsin (Madison), 1973; Ph.D., Cornell, 1979*
Cassandra Lynn Smith. *B.S., West Virginia, 1967; M.S., 1970; Ph.D., Texas A&M, 1974*

LECTURER
Jerard Hurwitz, Ph.D.

Medicine

Bard Professor and Chairman

Robert M. Glickman. *B.A., Amherst, 1960; M.D., Harvard, 1964*

At Presbyterian Hospital

Professors

Qais Al-Awqati (also Physiology). *M.B., Ch.B., Baghdad, 1962*
Arthur Bank (also Genetics and Development). *B.A., Columbia, 1956; M.D., Harvard, 1960*
J. Thomas Bigger (also Pharmacology). *B.A., Emory, 1955; M.D., Georgia, 1960*
John P. Bilezikian (also Pharmacology). *B.A., Harvard, 1965; M.D., Columbia, 1969*
Vincent P. Butler, Jr. *B.A., St. Peter's, 1949; M.D., Columbia, 1954*
Robert E. Canfield. *B.S., Lehigh, 1952; M.D., Rochester, 1957*
Paul J. Cannon. *B.A., Holy Cross, 1954; M.D., Harvard, 1958*
Leonard Chess. *B.S., Massachusetts Institute of Technology, 1964; M.D., State University of New York (Downstate), 1968*
Rose Ruth Ellison (in the Cancer Center). *B.A., Barnard, 1943; M.D., Columbia, 1948*
Michael Field. *B.A., Chicago, 1953; M.D., Boston, 1959*
Andrew G. Frantz. *B.A. Harvard, 1951; M.D., Columbia, 1955*
DeWitt S. Goodman (Tilden-Weger-Bieler Professor of Preventive Medicine). *B.A., Harvard, 1951; M.D., 1955*
Robert I. Levy. *B.A., Cornell, 1957; M.D., Yale, 1961*
John Lindenbaum. *B.A., Cornell, 1954; M.D., Harvard, 1959*
John N. Loeb. *B.A., Harvard, 1957; M.D., 1961*
Harold C. Neu (also Pharmacology). *B.A., Creighton, 1956; M.D., Johns Hopkins, 1960*
Elliott F. Osserman (American Cancer Society Professor). *B.A., Columbia, 1945; M.D., 1947*
Benvenuto Pernis (also Microbiology). *M.D., Milan, 1949*
Donald F. Tapley (Alumni Professor). *B.S., Acadia, 1948; M.D., Chicago, 1952*
Gerald E. Thomson (Samuel Lambert Professor). *B.S., Queens, 1955; M.D., Howard, 1959*
I. Bernard Weinstein (Frode Jensen Professor) (also Public Health). *B.S., Wisconsin, 1951; M.D., 1955*

Professors of Clinical Medicine

Felix E. Demartini. *B.A., Columbia, 1943; M.D., 1946*
Donald A. Holub. *B.A., Columbia, 1949; M.D., 1952*
Israel Jaffe. *B.S., New York University, 1947; M.D., Columbia, 1950*
Edgar Leifer. *B.S., College of the City of New York, 1937; M.A., Columbia, 1939; Ph.D., 1941; M.D., 1946*
Thomas Q. Morris. *B.A., Notre Dame, 1954; M.D., Columbia, 1958*
Jane H. Morse. *B.A., Smith, 1951; M.D., Columbia, 1955*
Joseph C. Sweeting. *B.S., Holy Cross, 1951; M.D., Columbia, 1956*
Robert N. Taub. *B.A., Yeshiva, 1957; M.D., Yale, 1961; Ph.D., London, 1969*
Robert T. Whitlock. *B.A., North Carolina, 1950; M.D., 1957*

Adjunct Professor of Clinical Medicine

Robert H. Palmer. *B.A., Oberlin, 1953; M.D., Harvard, 1957*

Professor of Social Medicine

David J. Rothman (Bernard Schoenberg Professor) (Director, Center for the Study of Society and Medicine). *B.A., Columbia, 1958; M.A., Harvard, 1959; Ph.D., 1964*

Clinical Professors

John R. Edsall. *B.A., Cambridge, 1945; M.B., B.Ch., 1948*
Abbie I. Knowlton. *B.A., Bryn Mawr, 1983; M.D., Columbia, 1942*
Jay I. Meltzer. *B.A., Princeton, 1949; M.D., Columbia, 1953*
Richard J. Stock. *B.S., Yale, 1944; M.D., Columbia, 1947*
John A. Wood. *B.A., Harvard, 1943; M.D., 1946*

Associate Professors

Leslie Baer. *B.A., Wisconsin, 1959; M.D., Columbia, 1963*
Peter R. B. Caldwell. *B.A., Dartmouth, 1954; M.D., Harvard, 1958*
Henry N. Ginsberg. *B.A., Brooklyn, 1960; M.D., State University of New York (Downstate), 1970*
Faramarz Ismail-Beigi. *B.A., Berea, 1962; M.D., Johns Hopkins, 1966; Ph.D., California (San Francisco), 1971*
Karen L. Kaplan. *B.A., Miami (Ohio), 1963; Ph.D., M.D., Chicago, 1969*
Alan Tall. *M.B., B.S., Sydney (Australia), 1970*

Associate Professors of Clinical Medicine

Gerald B. Appel. *B.A., Cornell, 1968; M.D., Albert Einstein, 1972*
Conrad B. Blum. *B.S., Northwestern, 1969; M.D., 1971*
Ronald E. Drusin. *B.S., Union (Schnectady), 1962; M.D., Columbia, 1966*
Yale Enson. *B.A., Columbia, 1948; M.D., State University of New York (Downstate), 1953*
Dorothy Estes. *B.C., Wheaton (Massachusetts), 1946; M.D., Columbia, 1950*
Glenda J. Garvey. *B.A., Wellesley, 1964; M.D., Columbia, 1969*
Elsa-Grace V. Giardina. *B.A., Bryn Mawr, 1961; M.D., New York Medical College, 1965*
Robert H. Heisenbuttel. *B.A., Thiel, 1959; M.D., Columbia, 1963*
Wylie C. Hembree III (also Obstetrics and Gynecology). *B.A., Vanderbilt, 1960; M.D., Washington (St. Louis), 1964*
Thomas P. Jacobs. *B.A., Amherst, 1964; M.D., Johns Hopkins, 1968*
Lynne L. Johnson. *B.A., Wellesley, 1965; M.D., Columbia 1969*
George W. Melcher, Jr.. *B.A., Colorado, 1943; M.D., Columbia, 1946*
Allen Bryant Nichols. *B.A., Yale, 1967; M.D., 1971*
Juan Oliver. *Bachiller, Institute Menendez (Spain), 1961; M.D., Barcelona, 1967*
James A. Reiffel. *B.A., Duke, 1965; M.D., Columbia, 1969*
Ethel S. Siris. *B.A., Radcliffe, 1967; M.D., Columbia, 1971*
Frank R. Smith. *B.A., Dartmouth, 1959; M.D., Columbia, 1962*
Francis M. Weld. *B.A., Harvard, 1961; M.D., Columbia, 1965*

Associate Clinical Professors

Ralph S. Blume. *B.A., Amherst, 1960; M.D., Columbia, 1964*
John O. Burris. *B.S., Wyoming, 1952; M.D., Rochester, 1956*
Michael H. Cohen. *B.A., Johns Hopkins, 1961; M.D., 1965*
Oliver T. Fein. *B.A., Swarthmore, 1962; M.D., Case Western Reserve, 1967*
Kenneth C. Fine. *M.D., Catholic (Louvain, Belgium), 1970*
Lionel Grossbard. *B.A., Columbia, 1957; M.D. 1961*
George A. Hyman. *B.A., Columbia, 1942; M.D., 1945*
Oscar Lebwohl. *B.A., Dartmouth, 1968; M.D., Harvard, 1972*

William Lovejoy. *B.A., Yale, 1956; M.D., Columbia, 1962*
Eric R. Marcus (also Psychiatry). *B.A., Columbia, 1965; M.D., Wisconsin, 1969*
David J. McConnell. *B.A., Cornell, 1958; M.D., Yale, 1962*
George H. McCormack, Jr. *B.S., Holy Cross, 1945; M.D., Columbia, 1949*
Hans Neuberg. *B.A., Wagner, 1941; M.D., Columbia, 1950*
Carmen Ortiz-Neu. *B.A., Wellesley, 1959; M.D., Columbia, 1963*
Michael F. Parry. *B.A., Yale, 1966; M.D., Columbia, 1970*
Eric R. Powers. *B.A., Cornell, 1969; M.D., Harvard, 1974*
Eve E. Slater. *B.A., Vassar, 1967; M.D., Columbia, 1971*
Jeffrey A. Stein. *B.A., Harvard, 1960; M.D., 1965*
Earl A. Wheaton, Jr. *B.A., Princeton, 1950; M.D., Columbia, 1954*

Research Scientist

Steven Birken. *Ph.D., St. John's (New York), 1972*

Assistant Professors

Ilan Bank. *M.D., Tel Aviv, 1975*
Kapil N. Bhalla. *M.B.B.S., Delhi, 1975*
Gary R. Burke. *B.A., St. Mary's, 1969; M.D., Minnesota, 1973*
L. David Carmichael. *B.A., Harvard, 1969; M.D., Albert Einstein College of Medicine, 1976*
Rita A. Charon. *B.A., Bensalem College, 1970; M.D., Harvard, 1978*
Herbert Chase, Jr. *B.A., Brown, 1970; M.D., Mt. Sinai, 1974*
Randolph Cole. *M.D., State University of New York (Downstate), 1973*
James Coromilas. *B.S., Columbia, 1969; M.D., McGill, 1975*
Nicholas Davidson. *M.B., B.S., Kings College Hospital Medical School (London), 1974*
Ira Jay Goldberg. *B.S., Massachusetts Institute of Technology, 1971; M.D., Harvard, 1975*
Steven Grant. *M.D., Mt. Sinai Medical School, 1973*
Richard S. Haber. *B.A., Harvard, 1973; M.D., New York University, 1977*
Alexander A. Hindenberg. *B.S., State University of New York (Stony Brook), 1974; M.D., Rutgers, 1978*
Andrew M. Keller. *B.A., Ithaca, 1975; M.D., Ohio State, 1979*
Thomas Ralph Kleyman. *B.S., Syracuse, 1973; M.D., Washington (St. Louis), 1978*
David S. Leibowitz. *B.A., Columbia, 1972; M.D., 1977*
Arthur M. Magun. *B.A., Haverford, 1972; M.D., Mt. Sinai, 1977*
Jacques P. Merab. *B.S., Massachusetts Institute of Technology, 1976; M.D., Harvard, 1980*
Alfred I. Neugut. *Ph.D., M.D., Columbia, 1977*
John Owen. *B.ScM., McMaster (Ontario), 1972; M.D., 1974*
Alice S. Prince (also Microbiology). *B.A., Wellesley, 1971; M.D., Columbia, 1975*
Robert W. Rees-Jones. *B.A., Dartmouth, 1975; M.D., Harvard, 1979*
Brian Scully. *B.A., Trinity (Dublin), 1969; M.B., 1971*
Elizabeth Shane. *B.S., Dalhousie, 1969; M.D., Toronto, 1975*
Steven Shea (also Public Health). *B.A., Harvard, 1968; M.D., Yale, 1971; M.D., Columbia, 1979*
Susan F. Steinberg. *B.S., Massachusetts Institute of Technology, 1972; M.D., Harvard, 1976*
Ira A. Tabas. *B.S., Tufts, 1975; M.D., Ph.D., Washington (St. Louis), 1977*
Sharon Wardlaw. *B.S., Cornell, 1970; M.D., 1975*
Rita Marie Watson. *B.A., Nebraska, 1971; M.S., Northwestern, 1973; M.D., Harvard, 1976*

Assistant Professors of Social Medicine

Sherry I. Brandt-Rauf. *M.Phil., Columbia, 1978; J.D., 1981*
Robert I. Zussman. *B.A., Columbia, 1970; M.Phil., 1974; Ph.D., 1981*

Assistant Professors of Clinical Medicine

Myles Akabas. *B.A., Cornell, 1977; M.D., Einstein, 1982*
Terri F. Apfelbaum. *B.A., Barnard, 1976; M.D., Columbia, 1980*

Andrew David Berke. *B.S., Brown, 1976; M.D., 1979*
David K. Blood. *B.A., Amherst, 1962; M.D., Columbia, 1966*
Peter J. Buchin. *B.A., Williams, 1970; M.D., Yale, 1974*
David J. Cohen. *B.A., Michigan, 1970; M.D., New York University, 1972*
Steven J. Corwin. *B.S., Northwestern, 1977; M.D., 1979*
Robert H. DeBellis. *B.S., Queens, 1951; M.D., Columbia, 1958*
Jerry Gliklich. *B.A., Columbia, 1969; M.D., 1975*
Mark J. Goldberger. *B.A., Johns Hopkins, 1969; M.D., Columbia, 1973*
Peter Green. *M.B., B.S., Sydney, 1970*
Marc Grodman. *B.A., Pennsylvania, 1973; M.D., Columbia, 1977; M.P.P., Harvard, 1982*
Thomas P. W. Hui. *B.S., Massachusetts Institute of Technology, 1975; M.D., New York University, 1979*
Rima Gail Kopelman. *B.A., Barnard, 1971; M.D., Columbia, 1977*
Cheryl Kunis. *M.D., Albert Einstein, 1975*
Rafael A. Lantigua. *M.D., Autonomous (Santo Domingo), 1972*
Jonathan LaPook. *B.S., Yale, 1975; M.D., Columbia, 1980*
Benjamin H. Lewis. *B.A., California (Berkeley), 1973; M.D., California (San Francisco), 1977*
Frank S. Livelli. *B.A., Columbia, 1972; M.D., Harvard, 1976*
Aaron Manson. *B.A., Columbia, 1972; M.D., 1976*
David M. Margulies. *B.A., Amherst, 1973; M.D., Harvard, 1977*
Roger N. Maxfield. *B.A., Brown, 1974; M.D., 1977*
Robert McConnell. *B.A., Hamilton, 1969; M.D., Columbia, 1973*
J. Gregory Mears. *B.S., Trinity (Connecticut), 1969; M.D., Columbia, 1973*
Robin O. Motz. *B.A., Columbia, 1959; Ph.D. 1965; M.D., 1975*
Constance Park. *B.A., Radcliffe, 1964; M.S., Harvard, 1967; M.D., Albert Einstein, 1974*
Kenneth Prager. *B.A., Columbia, 1964; M.D., Harvard, 1968*
Marshall Primack. *B.A., Louisville, 1961; M.D., Johns Hopkins, 1965*
Barrie Lynn Raik. *B.A., Harpur, 1967; M.D., New York University, 1977*
Frederick G. Rapoport. *B.A., Columbia, 1970; M.D., 1974*
Dennis S. Reison. *B.S., Yale, 1971; M.D., Stanford, 1975*
John L. Roglieri. *B.A., B.S., Lehigh, 1960; M.D., Harvard, 1966*
Mario Romagnoli. *B.S., Fordham, 1972; M.D., Columbia, 1976*
Lewis B. Schneider. *B.A., Queens, 1974; M.D., State University of New York (Downstate), 1978*
Harvey A. Schneier. *B.A., Columbia, 1963; M.D., 1967*
Stanley Schneller. *B.A., New York University, 1973; M.D., Harvard, 1977*
Larry L. Schulman. *B.A., Cornell, 1974; M.D., State University of New York (Downstate), 1978*
Allan Schwartz. *B.S., City College, 1967; M.S., Harvard, 1968; M.D., Columbia, 1974*
Alan H. Seplowitz. *B.A., Columbia, 1968; M.D., 1972*
William H. Sherman. *B.S., Pennsylvania State, 1967; M.D., Jefferson, 1969*
Marjorie Slankard. *B.A., Missouri, 1967; M.D., 1971*
Leonard Stern. *B.A., City University of New York, 1972; M.D., New York Medical College, 1975*
Mark Stoopler. *B.S., Tulane, 1971; M.D., Cornell, 1974*
Joseph Tenenbaum. *B.A., Brandeis, 1968; M.D., Harvard, 1974*
Byron Thomashow. *B.A., Columbia, 1970; M.D., 1974*
Christine C. Weart. *M.D., New York University, 1979*
Jack B. Weissman. *B.A., New York University, 1966; M.D., Harvard, 1970*
Gail S. Williams. *B.A., Wellesley, 1964; M.D., Columbia, 1968*
Chun Keung Yip. *B.S., St. Francis, 1972; M.D., Albert Einstein College of Medicine, 1976*

Assistant Professor of Clinical Social Work

Dena Fisher. *B.A., Queens (New York), 1965; M.S.W., New York University, 1968*

Assistant Clinical Professors

Alfred Becker. *M.D., Albert Einstein, 1962*
Jorge Cartes-Quinones. *B.A., Rutgers, 1972; M.D., Johns Hopkins, 1976*
Richard B. Duane, Jr. *B.A., Princeton, 1940; M.D., Columbia, 1943*
Juan G. Edreira. *M.D., Havana, 1951*

Seth D. Feltheimer. *B.A., Johns Hopkins, 1975; M.S., Wagner College, 1977; M.D., Universidad de Navarra (Pamplona, Spain), 1981*
Daniel L. Larson. *M.D., Columbia, 1946*
Robert Lewy. *B.A., Rochester, 1967; M.D., New Jersey, 1971*
Arnold Lisio. *B.S., Rochester, 1956; M.D., 1961*
Daniel L. Macken. *B.A., Holy Cross, 1955; M.D., Boston, 1960*
Paul C. McCullough. *B.A., Rice, 1974; M.D., Johns Hopkins, 1978*
John Postley. *B.A., Yale, 1964; M.D., Columbia, 1968*
Nicholas Rango. *B.S., St. Louis, 1966; M.D., Northwestern, 1970*
Jane Sillman. *B.A., Radcliffe, 1964; M.D., New York University, 1970*
Arthur I. Snyder. *B.A., Columbia, 1946; M.D., 1950*
Cornelius J. Tyson. *B.A., Princeton, 1939; M.D., Columbia, 1943*
Natalie Warner. *B.A., Swarthmore, 1969; M.D., Cornell, 1975*

Associate Research Scientists

Joseph M. Backer. *M.S., Novosibirsk (U.S.S.R.), 1966; Ph.D., 1969*
Charles Bisgaier. *B.A., Oneonta, 1974; Ph.D., George Washington, 1981*
William S. Blaner. *B.S., Maryland, 1972; M.S., Tennessee, 1975; Ph.D., 1979*
Nai-Xun Chin. *M.D., Shanghai Second Medical College, 1961*
Mary Ann Gawinowicz. *B.A., Douglass, 1974; Ph.D., Columbia, 1978*
Alexander Kritchevsky. *D.V.M., Faculty of Veterinary Medicine (Odessa), 1975*
Chung Yuan Liu. *M.S., North Dakota, 1968; Ph.D., Illinois Institute of Technology, 1974*
Roberto Lorenzet. *Dr.Bio.Sci., Milan, 1980*
Joyce W. Lustbader. *B.S., Rutgers, 1977; M.S., 1978, M.Phil., 1980; Ph.D., 1982*
Scott O'Grady. *B.S., Eastern Illinois, 1978; M.S., Illinois, 1980; Ph.D., 1983*
Kenneth B. Pomerantz. *B.A., Adelphi, 1974; M.A., Boston, 1977; Ph.D., Georgetown, 1981*
Ildiko Radichevich. *M.A., Ukrainian Technological, 1948; Ph.D., Columbia, 1958*
Westley H. Reeves. *B.A., Columbia, 1975; M.D., Yale, 1979*
Steven L. Roffman. *B.A., Queens, 1965; M.S., New York University, 1968; Ph.D., 1973*
Robert R. Sciacca. *B.S., Columbia, 1971; M.S., 1974*
Dianne R. Soprano. *B.S., Newton College of the Sacred Heart, 1975; Ph.D., Rutgers, 1980*

Adjunct Associate Research Scientist

Michelle Greene. *B.A., Queens, 1971; M.D., State University of New York (Buffalo), 1974*

SPECIAL LECTURERS
Hylan A. Bickerman, M.D.
Andre F. Cournand, M.D.
Hamilton Southworth, M.D.
Alfred Steiner, M.D.

LECTURERS
Nicholas P. Christy, M.D.
Edward E. Fischel, M.D.
William M. Manger, M.D.
Henry M. Thomas III, M.D.

ASSOCIATES IN CLINICAL MEDICINE
Marcia B. Bull, M.D.
Donna M. Hartl, M.D.
Elias M. Kaimakliotis, M.D.
Alan L. Saroff, M.D.
Suzanne M. Stone, M.D.
Ellen M. Tedaldi, M.D.

INSTRUCTORS IN CLINICAL MEDICINE
Michael Bar, M.D.
Howard J. Barnum, M.D.
Nancy M. Bennett, M.D.
Alexander Black, M.D.
Eric M. Bonnem, M.D.
David N. Burns, M.D.
Bryan Bryzinski, M.D.
Amitabh Chak, M.D.
Ann P. D'Adamo, M.D.
Amita J. Desai, M.D.
Arthur R. DeSimone, M.D.
Michael Goldman, M.D.
Susan Goodman, M.D.
Joseph Heller, M.D.
Ralph Herz, Jr., M.D.
Nancy F. Kahn, M.D.
Michael D. Kerner, M.D.

INSTRUCTORS *(continued)*
Gregory Kidwell, M.D.
Donald W. Landry, M.D.
Seth Lederman, M.D.
Laureano Lopez-Garrido, M.D.
Pier Mancusi-Ungaro, M.D.
Mato Marinovich, M.D.
Carlton C. McGregor, M.D.
Stephen A. Morris, M.D.
Henry F. Novack, M.D.
Edward J. Parrish, M.D.

INSTRUCTORS *(continued)*
Daniel Popenoe, M.D.
Margaret Ricciardone, M.D.
Barry D. Rinker, M.D.
John M. Rodgers, M.D.
Paul B. Rothman, M.D.
Richard H. Runser, M.D.
Shonni J. Silverberg, M.D.
Rafael Soltren, M.D.
Kevin J. Williams, M.D.
Hannah Zackson, M.D.

At Mary Imogene Bassett Hospital

Professor of Clinical Medicine

Walter Franck. *B.A., Yale, 1960; M.D., Columbia, 1964*

Associate Professors of Clinical Medicine

John S. Davis. *B.A., Hamilton, 1952; M.D., Harvard, 1956*
Richard J. Horner. *B.A., Dartmouth, 1966; M.D., Harvard, 1969*
Herbert J. Marx. *B.E.E., Rensselaer Polytechnic Institute, 1956; M.D., Columbia, 1960*
Gary Weaver. *B.A., Goshen, 1964; M.D., Kansas, 1968*

Associate Clinical Professors

John J. May. *B.S., Notre Dame, 1969; M.D., Case Western Reserve, 1973*
Richard E. Reese. *B.A., Dartmouth, 1965; M.D., Harvard, 1969*
William Streck. *B.S., Oklahoma State, 1968; M.D., Missouri, 1973*

Assistant Professors of Clinical Medicine

Peter L. Arquin. *M.D., Pennsylvania State, 1972*
Wayne A. Bottner. *B.A., Lafayette, 1973; M.D., Cornell, 1977*
John G. Dier, Jr. *B.A., Williams, 1972; M.D., Rochester, 1976*
Patrick Dwyer. *B.S., Notre Dame, 1973; M.D., Washington (St. Louis), 1977*
Gerald D. Groff. *B.A., Franklin and Marshall College, 1983; M.D., Rochester, 1977*
Emery C. Herman. *B.A., Emory, 1949; M.D., Johns Hopkins, 1953*
Peter J. Howard. *B.A., Dartmouth, 1971; M.D., C.M., McGill, 1975*
Alan J. Kozak. *B.A., Rochester, 1965; M.D., 1969*
Antionette Kuzminski. *B.A., Smith, 1967; M.A., Rochester, 1970; M.D., Hawaii, 1977*
Don V. Lewis. *B.A., North Carolina, 1967; M.D., 1971*
Nancy Beth Merrell. *B.S., Wayne State, 1970; Ph.D., 1972; M.D., 1976*
David S. Pratt. *B.A., New Hampshire, 1967; M.D., Tufts, 1971*
Donald A. Raddatz. *B.A., Holy Cross, 1971; M.D., Minnesota, 1975*
William H. Ramsay. *B.A., Dartmouth, 1967; M.D., Columbia, 1970*
Dennis A. Savoie. *B.A., Providence, 1967; M.D., Vermont, 1971*
Michael S. Schwartzman. *B.A., Johns Hopkins, 1973; M.D., Medical College of Virginia, 1978*
David S. Svahn. *B.S., Massachusetts Institute of Technology, 1960; M.D., Columbia, 1965*
Steven E. Szebenyi. *B.A., Johns Hopkins, 1974; M.D., 1978*
David W. Vaules. *B.A., Dartmouth, 1960; M.S., 1961; M.D., Rochester, 1963*

Research Scientist

Leonard A. Sauer. *B.S., Cornell, 1956; M.D., Rochester, 1961; Ph.D., Rockefeller, 1966*

Assistant Clinical Professors

Carol Beechy. *B.A., Goshen College, 1970; M.D., Kentucky, 1977*
Raymond L. Heilman. *B.A., Tulas, 1976; M.D., Illinois, 1980*
Donald O. Pollock. *B.A., Hamilton, 1951; M.D., Harvard, 1955*
Richard J. Trimble. *B.S., Boston College, 1978; M.D., Georgetown, 1982*

INSTRUCTORS IN CLINICAL MEDICINE
Eric Jay Del Giacco, M.D.
Michael A. Foltzer, M.D.
Michael Levenstein, M.D.
James W. Walker, Jr., M.D.

At Harlem Hospital

Clinical Professors

Harold S. Ballard. *B.A., California (Los Angeles), 1948; M.D., Meharry, 1952*
Charles P. Felton. *B.Sc., Xavier, 1949; M.D., Geneva, 1956*
Kenneth Sterling. *B.A., Harvard, 1940; M.D., Johns Hopkins, 1953*

Associate Professors of Clinical Medicine

David Jocelyn Clain. *M.B., Ch.B., Capetown, 1959; M.D., 1968*
Donald A. Feinfield. *B.A., Rochester, 1965; M.D., Columbia, 1969*
Clayton L. Natta. *B.A., McMaster (Ontario), 1957; M.D., Toronto, 1961*

Associate Clinical Professors

George C. Branche. *B.A., Bowdoin, 1944; M.D., Boston, 1948*
Jay Brown. *B.A., Rutgers, 1964; M.D., New York University, 1968*
John B. Cromie. *M.D., Belfast (Northern Ireland), 1949*
William R. Cunnick, Jr. *B.A., Princeton, 1947; M.D., Columbia, 1951*
Thomas J. Garrett. *M.D., Queens (Ontario), 1971*
Jeanne A. Smith. *B.A., Sarah Lawrence, 1953; M.D., New York University, 1957*
Charles M. Yergan. *B.S., Columbia, 1944; M.D., 1947*

Assistant Professor

Ann M. Briscoe. *M.A., Vassar, 1945; Ph.D., Yale, 1949*

Assistant Professors of Clinical Medicine

Alfred R. Ashford. *B.A., Rutgers, 1970; M.D., Georgetown, 1975*
Jen-Tse Cheng. *M.D., National Taiwan, 1961*
Gail Marie Comer. *B.S., Wisconsin, 1973; M.D., Albert Einstein, 1978*
Jay Franklin Dobkin. *B.A., Columbia, 1968; M.D., Harvard, 1972*
Wanda Devora Huff. *B.A., Cornell, 1969; M.D., Yale, 1973*
Paul Killian. *B.S., Wake Forest, 1957; M.D., Bowman Gray, 1961*
Robert Gordon Lee. *M.B.Ch.B., Manchester, 1973*
Hazeline Nurse. *B.A., City University of New York, 1965; M.D., Medical College of Pennsylvania, 1969*
Velvie Ann Pogue. *B.S., Southern (Baton Rouge), 1970; M.D., Harvard, 1974*
David G. Savage. *B.A., Wesleyan, 1970; M.D., Columbia, 1974*

Assistant Clinical Professors

Valentine J. Burroughs. *B.A., Michigan, 1971; M.D., 1975*
James T. Chien. *M.D., Yale-in-China Medical College, 1943*

Marvin C. Cooper. *B.S., Queens, 1960; M.D., St. Louis, 1965*
Germaine M. Jacquette. *B.S.N., Catholic, 1961; M.A., New York University, 1968; M.D., 1979*
Milena L. Lewis. *B.A., Bryn Mawr, 1950; M.D., Columbia, 1954*
Bruce David Logan. *B.A., Colby, 1967; M.D., Columbia, 1972*
Richard R. Prouty. *M.D., Johns Hopkins, 1948*

SPECIAL LECTURER
Cecil G. Marquez, M.D.

ASSOCIATES IN CLINICAL MEDICINE
John C. DiJohn, M.D.
Pearl D. Foster, M.D.

INSTRUCTORS IN CLINICAL MEDICINE
Viola Anderson, M.D.
Jeffrey N. Bradshaw, M.D.
Bennie W. Chiles, M.D.
Angel R. Flores, M.D.
Carl A. Garnier, M.D.
Major Geer, M.D.

INSTRUCTORS *(continued)*
Ross T. Hamilton, M.D.
Barbara J. Harmon, M.D.
James H. Hubert, M.D.
Anthony King, M.D.
Rita Jean Louard, M.D.
Thomas J. Mattimore, M.D.
Shahab Momtazi, M.D.
Luigi M. F. Negri, M.D.
Christopher J. Nickerson, M.D.
Ruth C. Onukwue, M.D.
Thomas J. Price, M.D.
William J. Schwartz, M.D.
Mark I. Siegel, M.D.
Eric J. Vanderbush, M.D.
Michael D. Williams, M.D.

At Helen Hayes Hospital

Professor of Clinical Medicine

Robert Lindsay. *M.P.C.B., Glasgow, 1968; Ph.D., 1969*

Assistant Clinical Professor

Jack Tohme. *B.Sc., American (Beirut), 1970; M.D., 1974*

INSTRUCTOR IN CLINICAL MEDICINE
Marjorie Louise King, M.D.

At Morristown Memorial Hospital

Professor of Clinical Medicine

Albert S. Klainer. *B.S., Massachusetts Institute of Technology, 1957; M.D., Tufts, 1961*

Clinical Professor

John S. Banas, Jr. *B.S., Tufts, 1959; M.D., 1963*

Assistant Clinical Professor

Kenneth R. Adler. *B.S., Pittsburgh, 1968; M.D., Albany Medical College, 1973*
Emil Bisaccia. *B.A., Ohio State, 1974; M.D., Medical College of Ohio, 1979*
Joel E. Cannilla. *B.S., Mt. St. Mary's, 1956; M.D., Seton Hall, 1960*
Joseph F. Fennelly. *B.S., Seton Hall, 1952; M.D., New York Medical College, 1956*
Arthur Fisch. *B.A., Rutgers, 1965; M.D., Boston, 1969*
Gary Gerstein. *B.S., St. Joseph's (Pennsylvania), 1969; M.D., Jefferson, 1973*
Stephen Guss. *B.A., Yale, 1964; M.D., Harvard, 1968*
Oscar R. Kruesi. *B.S., Union (Schenectady), 1947; M.D., Cornell, 1951*
Robert V. McCormick. *B.S., Harvard, 1944; M.D., 1946*

Sudhir Mehta. *B.S., Bombay, 1967; M.B.B.S., 1972*
Earl Nielson. *B.S., City College of New York, 1962; M.D., Vermont. 1966*
Stephen W. Papish. *B.A., Pennsylvania, 1970; M.D., 1974*
William M. Petkun. *B.A., Harvard, 1978; M.D., New York University, 1982*
Joseph J. Ryan. *B.S., Notre Dame, 1965; M.D., State University of New York (Downstate), 1970*
Charles A. Shioleno. *M.D., Georgetown, 1977*
Lawrence B. Stein. *B.S., B.A., Minnesota, 1961; M.D., 1965*
James R. Sterret. *B.S., Virginia Military Institute, 1967; M.D., Virginia, 1971*
Jerrold M. Stock. *B.A., Northwestern, 1964; M.D., Chicago, 1968*
David Widman. *B.A., New York University, 1971; M.D., Harvard, 1975*

Assistant Clinical Professor

William M. Petkun. *B.A., Harvard, 1978; M.D., New York University, 1982*

INSTRUCTORS IN CLINICAL MEDICINE

Steven Adler, M.D.
Mark T. Atkins, M.D.
Hillel Ben-Asher, M.D.
Jon William Brunswick, M.D.
Donald P. Burt, M.D.
Robert A. Capone, M.D.
Alan Chanin, M.D.
Kevork Cileli, M.D.
Ronald Ciuffreda, M.D.
Bernard Davidoff, M.D.
John J. Delaney, M.D.
Barry Efros, M.D.
Joel R. L. Ehrenkranz, M.D.
Paul L. Fine, M.D.
Stuart W. Fox, M.D.
Peter Gallerstein, M.D.
Arthur Geller, M.D.
Lee W. Geller, M.D.
Eugenie George, M.D.
Steven Mark Gudis, M.D.
Arthur N. Hoaglund, M.D.
Thomas R. Holland, M.D.
Ibrahim Housri, M.D.
Stephen Krasnica, M.D.
David S. Lerman, M.D.
Stelio Mangiola, M.D.
James S. Najarian, M.D.
Mark A. Oliver, M.D.

INSTRUCTORS *(continued)*

Richard A. Paul, M.D.
John Penek, M.D.
William S. Pond, M.D.
Celso S. Puno, M.D.
Martin L. Reich, M.D.
Ralph Reichert, M.D.
Barry Reiter, M.D.
John E. Rossman, M.D.
Marie Lalor Rozan, M.D.
Stephen W. Rozan, M.D.
John Salaki, M.D.
Michael A. Samach, M.D.
Craig A. Schiffner, M.D.
Leslie David Schlesinger, M.D.
Felix Schletter, M.D.
Zalman R. Schrader, M.D.
Stephen Mark Schreibman, M.D.
Nassare-Din Shariati, M.D.
Dean C. Shore, M.D.
Leo H. Siegel, M.D.
Jay I. Stack, M.D.
Sheree Starrett, M.D.
John G. Valeri, M.D.
Richard Ira Watson, M.D.
Gary Weine, M.D.
Bennett Weissglass, M.D.
Samuel Wexler, M.D.
Barry Zitomer, M.D.

At Overlook Hospital

Clinical Professors

Michael Bernstein. *M.D., New York Medical College, 1953*
William F. Minogue. *B.S., Seton Hall, 1951; M.D., New York Medical College, 1960*

Associate Professor of Clinical Medicine

John J. Gregory. *B.S., Worcester Polytechnic Institute, 1953; M.D. Albany, 1961*

Associate Clinical Professors

Joel L. Duberstein (Family Practice). *B.A., Princeton, 1957; M.D., Columbia, 1961*
Mary T. Herald. *B.A., New Rochelle, 1965; M.D., New Jersey College of Medicine and Dentistry, 1969*

Assistant Clinical Professors

Kevin Edmund Bell. *M.D., Columbia, 1975*
Fred G. Bromberg. *B.A., Johns Hopkins, 1974; M.D., Rochester, 1978*
Stephen J. Fischl. *B.A., Seton Hall, 1963; M.D., College of Medicine and Dentistry of New Jersey, 1967*
Robert A. Fuhrman. *B.A., Clark, 1962; M.D., Chicago, 1966*
Peter L. Goodluck. *M.B.B.S., Medical College (Bombay), 1958*
Samuel M. Gray. *B.S., Chicago, 1963; M.D., Chicago Medical School, 1967*
Mary T. Herald. *B.A., New Rochelle, 1965; M.D., New Jersey College of Medicine and Dentistry, 1969*
E. Thomas Holland (Family Practice). *B.A., Wesleyan, 1971; M.D., Chicago, 1975*
Thomas V. Inglesby. *B.S., Mt. St. Mary's, 1959; M.D., Maryland, 1963*
Joel D. Levinson. *B.A., Cornell, 1959; M.D., Georgetown, 1963*
Lawrence J. Nastro. *B.A., Brooklyn, 1961; M.D. State University of New York (Downstate), 1965*
William A. Tansey, III. *B.A., Yale, 1966; M.D., Columbia, 1970*
William N. Toth. *B.S., Georgetown, 1956; M.D., Hahnemann, 1960*
William E. Wagner, Jr. *B.A., Princeton, 1945; M.D., Columbia, 1950*
Richard Weinberg. *B.S., Rensselaer, 1970; M.D., Union, 1970*
Donald H. Wernsing (Family Practice). *M.D., Hahnemann, 1975*

INSTRUCTORS IN CLINICAL MEDICINE

Lloyd Howard Alterman, M.D.
Joseph A. Belladonna, M.D.
Kenneth Brin, M.D.
Donald J. Brock, M.D.
H. Oliver Brown, Jr., M.D.
Kopel Burk, M.D.
Stuart Burstin, M.D.
Andrew Coronato, Jr., M.D.
H. William Diefendorf, M.D.
Rosina B. Dixon, M.D.
Charles E. Dooley, Jr., M.D.
Joseph T. Faraldo, M.D.
John P. Fatry, M.D.
Robert B. Francis, M.D.
Trina Frankel, M.D.
Harvey Gerhard, M.D.
Carl S. Goldstein, M.D.
John R. Hanagan, M.D.
Eugene R. Kelly, M.D.

INSTRUCTORS *(continued)*

Michael B. Kerner, M.D.
A. Ralph Kristeller, M.D.
David I. Lintz, M.D.
Ines Linzmayer, M.D.
Joseph G. Loeffler, M.D.
Michael Stephen Lux, M.D.
Robert P. Margie, M.D.
David P. Miller, M.D.
Sanford M. Reiss, M.D.
Robert L. Rosenbaum, M.D.
Melvin Rubinstein, M.D.
R. Gregory Sachs, M.D.
Ribert D. Slama, M.D.
Robert R. Springer, M.D.
Steven J. Stanzione, M.D.
Elliott M. Stein, M.D.
Michael Suhl, M.D.
Burton Tucker, M.D.
David Allen Worth, M.D.

At St. Luke's–Roosevelt Hospital Center

Professors

John F. Bertles. *B.S., Yale, 1945; M.D., Harvard, 1952*
Robert B. Case. *B.A., Ohio Wesleyan, 1953; M.D., Columbia, 1958*
Peter R. Holt. *B.Sc., Tolington, 1949; M.B., B.S., London, 1954*
Gerald B. Phillips. *B.A., Princeton, 1946; M.D., Harvard, 1948*
William Rosner. *B.A., Wisconsin, 1954; M.D., Albert Einstein, 1961*

Gerard M. Turino (John Keating Professor). *B.A., Princeton, 1945; M.D., Columbia, 1948*
Theodore Van Itallie. *B.S., Harvard, 1941; M.D., Columbia, 1945*
Harvey J. Weiss. *B.A., Harvard, 1951; M.D., 1955*

Professors of Clinical Medicine

A. L. Loomis Bell. *B.S., Wesleyan, 1944; M.D., Harvard, 1947*
Stanley Cortell. *B.S., Massachusetts Institute of Technology, 1957; M.D., Tufts, 1961*
Edward M. Dwyer. *B.A., Columbia, 1957; M.D., 1961*
Michael H. Grieco. *B.A., New York University, 1954; M.D., State University of New York (Downstate), 1957*
Harvey G. Kemp. *B.A., Oklahoma, 1955; M.D., Johns Hopkins, 1959*
Emil Pascarelli. *B.A., Columbia, 1952; M.D., Pavia (Italy), 1958*
Richard N. Pierson, Jr. *B.A., Princeton, 1961; M.D., Columbia, 1966*
F. Xavier Pi-Sunyer. *B.A., Oberlin, 1955; M.D., Columbia, 1959*
Miles J. Schwartz. *B.S., Queens (New York), 1947; M.D., New York University, 1961*

Adjunct Professor

Jules Hirsch. *B.S., Rutgers, 1944; M.D., Texas, 1948*

Clinical Professors

Jonas M. Goldstone. *B.S., Harvard, 1951; M.D., 1955*
Albert W. Grokoest. *B.S., Hamilton, 1940; M.D., Columbia, 1943*
Philip H. Henneman. *B.A., Harvard, 1943; M.D., 1946*

Associate Professors of Clinical Medicine

Judith Axelrod. *B.S., Wellesley, 1953; M.D. Cornell, 1967*
C. Redington Barrett. *B.A., Yale, 1955; M.D., Columbia, 1959*
Robert S. Bernstein. *B.A., Columbia, 1961; M.D., Harvard, 1965*
Jeffrey M. Brensilver. *M.D., Columbia, 1971*
Edward M. Dwyer. *B.A., Columbia, 1957; M.D., 1961*
Michael Lange. *M.D., Toronto, 1968*
Marianne J. Legato. *B.A., Manhattanville, 1956; M.D., New York University, 1962*

Associate Clinical Professors

Richard P. Ames. *B.A., Williams, 1954; M.D., Columbia, 1958*
Albert Attia. *B.A., Cornell, 1955; M.D., 1958*
Carlton Boxhill. *B.A., Columbia, 1964; M.D., 1968*
Norman A. Cagin. *B.S., Rutgers, 1963; M.D., New York Medical College, 1967*
Airlie A. Cameron. *B.A., Radcliffe, 1957; M.D., McGill, 1961*
Richard Collens. *B.S., Massachusetts Institute of Technology, 1959; M.D., New York Medical College, 1966*
George Dermksian. *B.A., Columbia, 1948; M.A., 1950; M.A., Tulane, 1950; M.D., Cornell, 1954*
James B. Gabriel. *B.A., Brown, 1945; M.D., Harvard, 1949*
Oscar Garfein. *B.A., Columbia, 1961; M.D., 1965*
Henry M. Greenberg. *B.A., Pennsylvania, 1961; M.D., Tufts, 1968*
Saul Kaplan. *B.S., Columbia, 1954; M.D., Tennessee, 1959*
Arthur Karanas. *B.A., New York University, 1954; M.D., State University of New York (Downstate), 1958*
Ronald Kraft. *B.S., Michigan, 1966; M.D., Cincinnati, 1970*
Arthur J. Lennon. *B.A., Fordham, 1956; M.D., Columbia, 1960*
Richard McCray. *B.A., Wesleyan, 1954; B.D., Yale, 1957; M.D., Columbia, 1962*
Myron C. Patterson. *B.A., Columbia, 1939; M.D., 1943*
Bruce H. Pinkernell. *B.A., Johns Hopkins, 1960; M.D., 1964*

Norton S. Rosensweig. *B.A., Princeton, 1957; M.D., New York University, 1961*
Eugene Santilli. *B.S., City College of New York, 1958; M.D., Medical University of Bologna, 1964*
Lawrence Scharer. *B.A., Columbia, 1954; M.D., 1958*
Seiichi Shimomura. *M.D., Okayama (Japan), 1945*
Gerald Weintraub. *B.A., New York University, 1950; M.D., 1954*
Herman Ziffer. *B.A., Brooklyn, 1949; M.D., Chicago, 1953*

Research Scientist

Beatrice M. Fairchild. *B.A., Hunter, 1942; M.A., Bryn Mawr, 1943; Ph.D., 1948*

Assistant Professors

Judith S. Hochman. *M.A., Harvard, 1974; M.D., 1977*
Donald Philip Kotler. *M.D., Albert Einstein College of Medicine, 1973*
Felicia Nowak. *B.A., Trinity (Washington), 1970; Ph.D., Wisconsin, 1975; M.D., Washington (St. Louis), 1978*

Assistant Professors of Clinical Medicine

Bertha Ann Bauer. *B.A., Smith, 1973; M.D., Columbia, 1977*
Norma M. T. W. Braun. *B.A., Pennsylvania, 1959; M.D., Columbia, 1963*
Edward W. Colt. *M.D., University College Hospital (London), 1962*
Michael S. Conjalka. *B.S., Indiana, 1962; M.D., Northwestern, 1973*
Robin Jane Dibner. *B.S., Michigan, 1974; M.D., Wayne State, 1979*
Ann Geller (Social Medicine). *M.A., Oxford, 1957; M.D., University College Hospital, 1960*
Katherina A. Hawkins. *B.A., Manhattanville, 1964; M.D., Columbia, 1973*
Kenneth J. Herwig. *B.A., Syracuse, 1967; M.D., Pennsylvania State, 1971*
Christopher Hoy. *B.A., Harvard, 1971; M.S., London School of Economics, 1972; M.D., Albert Einstein, 1977*
Gregg Armin Husk. *B.S., Chicago, 1970; M.D., 1975*
Gertrude Scott Lefavour. *B.A., Goucher, 1965; M.D., Medical College of Pennsylvania, 1970*
Jonathan A. Lorch. *B.A., Wisconsin, 1968; M.D., Tulane, 1972*
Allen Mogtader. *B.A., Columbia, 1966; M.D., State University of New York (Downstate), 1970*
Scott Jay Ratner. *B.S., Brooklyn, 1975; M.D., State University of New York (Downstate), 1979*
Mitchell J. Rubinoff. *B.A., Lehigh, 1974; M.D., Mt. Sinai, 1979*
Jean W. Saleh. *B.A., St. Joseph (Beirut), 1957; M.D., Faculte Francaise de Medicin, 1964*

Assistant Clinical Professors

Kenneth A. Altman. *B.A., Cornell, 1950; M.D., Columbia, 1954*
Wendy Aronson. *B.A., Vassar, 1965; M.D., New York University, 1968*
William J. Athos. *B.A., Columbia, 1942; M.D., State University of New York (Downstate), 1956*
John Thomas Barnard. *M.D., Texas Southwestern, 1976*
Harvey Benovitz. *B.A., Washington and Jefferson, 1958; M.D., Albert Einstein College of Medicine, 1962*
Robert Bernot. *B.A., Columbia, 1955; M.D., Buffalo, 1960*
Earl B. Brown. *B.S., Emory, 1938; M.D., 1942*
Richart Gunnar Carlson (also Pediatrics). *B.S., Trinity (Hartford), 1966; M.D., Columbia, 1970*
Thomas A. Coffee. *B.A., Columbia, 1972; M.S., 1974; M.D., Albert Einstein, 1980*
Kay Barbara Cynamon. *B.A., Pennsylvania, 1973; M.D., 1977*
Donald P. Dallas. *B.A., Columbia, 1950; M.D., 1954*
Robert K. Emy. *B.A., New York University, 1952; M.D., Medical College of Virginia, 1957*
James A. Feltman. *B.A., Columbia, 1941; M.D., 1944*
Martin Jay Frankel. *B.A., Columbia, 1968; M.D., Buffalo, 1960*
Richard P. Fried. *B.A., Brown, 1964; M.D., Columbia, 1968*
Zane Gaut. *B.S., Birmingham Southern, 1950, M.D., Tulane, 1954*
Richard Geltman. *B.A., Rutgers, 1967; M.D., Albert Einstein College of Medicine, 1971*

Joseph A. Grossman. *B.S., College of the City of New York, 1953; M.D., State University of New York (Downstate), 1957*
Gregory Miner Gustafson. *B.A., Yale, 1971; M.D., Columbia, 1977*
Julian B. Hyman. *B.A., Columbia, 1945; M.D., Albany Medical College, 1947*
Michael R. Irwin. *B.B.A., Texas, 1968; M.D., Texas Southwestern, 1975*
John H. Keating. *B.A., Columbia, 1941; M.D., 1943*
Annetta J. Kimball. *B.A., Mt. Holyoke, 1964; M.D., Boston, 1968*
Edith Joan Langner. *B.A., Michigan, 1965; M.D., New York University, 1969*
Sharon Lewin. *M.D., Toronto, 1975*
John Reginald Little. *M.B., Ch.B., Otego (New Zealand), 1959; Ph.D., 1965*
Robert P. Lombardo. *B.S., Notre Dame, 1966; M.D., New York Medical College, 1970*
Athanasius Mallios. *B.A., Columbia, 1968; M.D., State University of New York (Upstate), 1973*
David K. Meriney. *B.A., Duke, 1956; M.D., 1960*
Lawson A. Moyer III. *B.A., Virginia, 1968; M.D., 1972*
Carl H. Nacht. *B.S., State University of New York (Stony Brook), 1971; M.D., Temple, 1976*
William M. Nicholas. *B.A., Williams, 1950; M.D., State University of New York (Syracuse) 1954*
Paul Martin Nonkin. *B.A., New York University, 1950; M.D., New York Medical College, 1954*
Mary Elizabeth O'Brien. *B.A., Vassar, 1973; M.D., Harvard, 1977*
Mary Margaret O'Sullivan. *B.A., Fordham, 1971; M.D., Cornell, 1975*
John J. Olichney. *B.S., Rutgers, 1965; M.D., Albany, 1969*
Barbara Lynn Parks. *B.A., Wisconsin, 1971; M.D., 1978*
Anthony J. Pepe. *B.S., St. John's (New York), 1966, M.D., Columbia, 1970*
Robert B. Roven. *B.A., Columbia, 1953; M.D., 1957*
Morton Schwimmer. *B.A., Lafayette (Pennsylvania), 1948; M.D., Jefferson, 1951*
Mark V. Sherrid. *B.A., Cornell, 1969; M.D., Columbia, 1972*
Kenneth N. Weinstein. *B.A., Vermont, 1955; M.D., New York University, 1959*
Michelle L. Winter. *B.A., Barnard, 1971; M.D., Cornell, 1975*

Associate Research Scientists

Mukul Kumar Basu. *B.S., Calcutta, 1961; M.S., Kalyani, 1963; Ph.D., Jadavpur, 1969*
Thalia Boussios. *B.S., Columbia, 1965; M.S., New York University, 1977; Ph.D., 1978*
Bonnie Bray. *B.S., Georgia, 1950; Ph.D., Columbia, 1963*
M. Saeed Khan. *M.S., Brown, 1964; Ph.D., Imperial College of Science and Technology (London), 1966*
Bruce R. Lages. *B.S., Stevens Institute of Technology, 1964; M.S., 1967; Ph.D., 1972*
Mohan Muthireval Reddy. *B.Sc., Agricultural College (India), 1963; M.Sc., Indian Agricultural Research Institute, 1966; Ph.D., Chicago, 1969*
Mei-Uih Yang. *B.Ed., National Taiwan, 1959; M.S., Columbia, 1967; Ph.D. 1976*
Kwo-Yih Yeh. *B.S., National Taiwan, 1965; Ph.D., Washington (St. Louis), 1975*

SPECIAL LECTURERS
William S. Clark, M.D.
A. Gregory Jameson, M.D.
Henry G. Shaffeld, M.D.
Myron Wright, M.D.

LECTURERS
Martin Finkel, M.D.
David Schwimmer, M.D.
Carol Wilkinson, M.D.

ASSOCIATES IN CLINICAL MEDICINE
Vernon G. Baker, M.D.
Michael S. Baum, M.D.
Michael Borecky, M.D.
John Thomas Cappadona, M.D.

ASSOCIATES *(continued)*
David Stewart Carroll, M.D.
Paul Chrzanowski, M.D.
Albert Cohen, M.D.
John Cornwall, M.D.
James Ducey, M.D.
Jeanne Fastook, M.D.
Donald R. Fishman, M.D.
Eugene Freundlich, M.D.
Francis G. Geer, M.D.
Maurice F. Goodbody, M.D.
Carolyn E. Goodstein, M.D.
Barry E. Goozner, M.D.
Antoine C. Harovas, M.D.
William Hopewell, M.D.

ASSOCIATES *(continued)*
Herbert Ivan Jernow, M.D.
Mark Henry Kinn, M.D.
Randy Lyn Levine, M.D.
Woodson Charles Merrell, M.D.
Thomas C. Moore, III, M.D.
Thomas M. Nall, M.D.
Norman C. Peeler, M.D.
Arnold M. Phillips, M.D.
Nancy Roistacher, M.D.
Nicholas Steiner, M.D.
Thomas Tamlyn, M.D.
Walter Gabriel Wasser
David Wolinsky, M.D.

INSTRUCTORS IN CLINICAL MEDICINE

Eric Andreae, M.D.
Elliot Arons, M.D.
Lestrino C. Baquiran, M.D.
David Barenberg, M.D.
Elizabeth J. Beautyman, M.D.
Hillard M. Boskey, M.D.
Cecil B. Broderick, M.D.
Daniel L. Brook, M.D.
Daniel Henry Cohen, M.D.
John Cohn, M.D.
Samuel J. Daniel, M.D.
Hugh C. Davidson, M.D.
Luziano Del Guzzo, M.D.
Margaret Dessau, M.D.
Cathy L. Drake, M.D.
William E. Edelheit, M.D.
Edward Eden, M.D.
Jerome Paul Ehrlich, M.D.
Loellen Kay English, M.D.
Jason Faller, M.D.
James W. Fingerhut, M.D.

INSTRUCTORS *(continued)*

Stuart W. Forster, M.D.
Carola P. Friedman, M.D.
Samuel H. Friedman, M.D.
Dennis Gage, M.D.
Andrew Milton Goldmann, M.D.
Joseph Daniel Granderson, M.D.
George Haroutiounian, M.D.
Martin J. Hecht, M.D.
Richard G. Hershey, M.D.
Karl R. Hoffmann, M.D.
Peter L. Hofmann, M.D.
Dennis G. Huskins, M.D.
Wade A. Johnson, M.D.
Alan B. Kadet, M.D.
Mitchell Kahn, M.D.
Robert Stanley Karol, M.D.
Martin Philip Kasofsky, M.D.
Jeanne Florence Kassler, M.D.
James David Lax, M.D.
Andrew C. Leifer, M.D.

INSTRUCTORS *(continued)*

Larry Lipson, M.D.
Robert Allen Meyers, M.D.
Alfred Miller, M.D.
Laura K. Millman, M.D.
Richard Ross Neufeld
Lazare Novack, M.D.
Annette Osher, M.D.
Martin Saul Pine, M.D.
David M. Puro, M.D.
Guy A. Renvoize, M.D.
Ernest C. Richards, M.D.
Thomas D. Robinson, M.D.
Harry A. Roselle, M.D.
Barry Rudin, M.D.
Carol B. Schreck, M.D.
Howard N. Schwartz, M.D.
Michael S. Siegal, M.D.
Thomas V. Tupper, M.D.
Daniel C. Williams, M.D.
William P. Winkler, M.D.
Paul E. Wiseman, M.D.

Microbiology

Higgins Professor and Chairman

Lucille Shapiro. *B.A., Brooklyn, 1962, Ph.D., Albert Einstein, 1966*

Professors

Dickson D. Despommier (in Public Health). *Ph.D., Notre Dame, 1967*
Paul D. Ellner (also Pathology). *B.S., Long Island, 1940; M.D., Southern California, 1952; Ph.D., Maryland, 1956*
Bernard F. Erlanger. *B.S., College of the City of New York, 1943; M.A., New York University, 1948; Ph.D., Columbia, 1951*
Harold S. Ginsberg (Higgins Professor). *B.A., Duke, 1937; M.D., Tulane, 1941*
Maxwell E. Gottesman (Revson Professor) (also Biochemistry). *B.A., Swarthmore, 1956; M.D., Yale, 1960; Ph.D., 1965*
Sherie L. Morrison. *B.A., Stanford, 1963; Ph.D., 1966*
Benvenuto Pernis (also Medicine). *M.D., Milan, 1947*
Henry J. Vogel (in Pathology). *B.S., London, 1939; M.S., New York University, 1941*

Professor of Dentistry

Solon A. Ellison. *B.S., Columbia, 1942; D.D.S., 1946; Ph.D., 1958*

Associate Professors

Philip D'Alesandro (also Public Health). *B.S., Rutgers, 1952; M.S., 1954; Ph.D., Chicago, 1958*
David Henry Figurski. *B.S., Pittsburgh, 1969; Ph.D., Rochester, 1974*
Saul J. Silverstein. *B.S., Cornell, 1968; Ph.D., Florida, 1971*
Charles Stuart Hamish Young. *B.A., Oxford, 1966; D. Phil., 1969*

Adjunct Associate Professor

Victor Bokkenheuser. *M.D., Copenhagen, 1945*

Research Scientist

Paul B. Fisher. *B.A., Hunter, 1968; Ph.D., Rutgers, 1974*

Assistant Professors

W. Louis Cleveland. *B.S., Columbia, 1967; Ph.D., Rutgers, 1975*
M. Suzanne Holmes Giannini (in Public Health). *Ph.D., Rutgers, 1974*
Alexander D. Goldfarb. *Diploma, Moscow State University, 1969; Ph.D., Weizmann Institute (Israel), 1980*
Minh Chi Nguyen Huu (in Urology). *M.Sc., Technical (West Berlin), 1975; Ph.D., Max-Planck Institut, 1977*
Richard C. Parker. *B.S., Massachusetts Institute of Technology, 1974; Ph.D., California Institute of Technology, 1979*
Vincent Racaniello. *B.A., Cornell, 1974; Ph.D., Mt. Sinai, 1979*
Howard Shuman. *B.S., Massachusetts, 1974; Ph.D., Harvard, 1979*

Adjunct Assistant Professors

Vincent Bonagura. *B.A., Columbia, 1971; M.D., 1975*

Associate Research Scientists

Shih M. Chen. *B.S., Tung Hai (Taiwan), 1969; M.S., Illinois State, 1973; M.A., Columbia, 1974; Ph.D., 1979*
Doris Tse. *B.A., Vassar, 1972; Ph.D., Columbia, 1984*
Norbert H. Wasserman. *BN.A., Bucharest, 1944; M.A., 1947; Eng.D., 1962*

SPECIAL LECTURERS
Elvin Kabat, Ph.D.
Wladyslaw Manski, D.S.

At St. Luke's–Roosevelt Hospital Center

Senior Research Scientist

George A. Hashim (in Surgery). *Ph.D., Columbia, 1967*

Neurological Surgery

Byron Stookey Professor and Chairman

Bennett M. Stein. *B.A., Dartmouth, 1952; M.D., McGill, 1955*

At Presbyterian Hospital

Professors of Clinical Neurological Surgery

Peter W. Carmel. *B.A., Chicago, 1956; M.D., New York University, 1960*
James W. Correll. *B.A., Brown, 1941; M.D., Cornell, 1944*
Edgar M. Housepian. *B.A., Columbia, 1949; M.D., 1953*

Associate Professor

Kalmon Post. *B.A., Columbia, 1963; M.D., New York University, 1967*

Associate Professors of Clinical Neurological Surgery

James G. McMurtry, III. *B.A., Rice, 1953; M.D., Baylor, 1957*
W. Jost Michelson. *B.A., Harvard, 1959; M.D., Columbia, 1963*
Donald Oliver Quest. *B.S., Illinois, 1961; M.D., Columbia, 1970*

Assistant Professor

Robert A. Solomon. *B.A., Yale, 1976; M.D., Johns Hopkins, 1980*

Assistant Professor of Clinical Neurological Surgery

Ronald Brisman. *B.A., Harvard, 1961; M.D., 1965*

Assistant Clinical Professors

George L. Becker. *B.A., Johns Hopkins, 1950; M.D., Hahnemann, 1954*
Harvey R. Nova. *B.A., Brooklyn, 1956; M.D., Columbia, 1960*

INSTRUCTORS IN CLINICAL NEUROLOGICAL SURGERY
Duncan B. Carpenter, M.D.
Saran S. Rosener, M.D.
Alfred A. Steinberger, M.D.

At Harlem Hospital

Assistant Clinical Professor

James E. O. Hughes. *B.A., Yale, 1958; M.D., Pennsylvania, 1962*

At Morristown Memorial Hospital

INSTRUCTOR IN CLINICAL NEUROLOGICAL SURGERY
Allen I. Gardner, M.D.

At Overlook Hospital

Clinical Professor

Henry Robert Liss. *M.D., Jefferson Medical College, 1948*

Neurology

Henry and Lucy Moses Professor and Chairman

Lewis P. Rowland. *B.S., Yale, 1945; M.D., 1948*

At Presbyterian Hospital

Professors

Darryl C. DeVivo (Sidney Carter Professor) (also Pediatrics). *B.A., Amherst, 1959; M.D., Virginia, 1964*
Salvatore DiMauro. *M.D., Padova (Italy), 1963*
Stanley Fahn (H. Houston Merritt Professor). *B.A., California (Berkeley), 1955; M.D., California (San Francisco), 1958*
Claude P. J. Ghez (also Physiology and Cellular Biophysics) (in the Center for Neurobiology and Behavior). *B.Sc., Geneva, 1960; M.D., Harvard, 1964*
William Allen Hauser (in the Sergievsky Center). *B.A., Western Reserve, 1958; M.D., St. Louis, 1962*
Arthur Karlin (also Biochemistry). *B.A., Swarthmore, 1957; Ph.D., Rockefeller, 1962*
Robert F. Lovelace. *B.S., London, 1953; M.R.C.P., 1958*
Audrey S. Penn. *B.A., Swarthmore, 1965; M.D., Columbia, 1960*
James H. Schwartz (also Physiology) (in the Center for Neurobiology and Behavior). *B.A., Columbia, 1954; M.D., New York University, 1959; Ph.D., Rockefeller, 1964*

Professor of Clinical Neurology

Arnold Gold (also Pediatrics). *B.A., Texas, 1947; M.S., Florida, 1949; M.D., Lausanne, 1950*
James F. Hammill. *B.S., LaSalle, 1947; M.D., Pennsylvania, 1948*
Jay P. Mohr (Sciarra Professor). *B.A., Haverford, 1958; M.S., Virginia, 1963; M.D., 1963*
Timothy A. Pedley. *B.A., Pomona, 1965; M.D., Yale, 1969*
Daniel Sciarra. *B.A., Harvard, 1940; M.D., 1943*

Associate Professors

Eduardo Bonilla. *B.A., San Simon (Bolivia), 1957; M.D., Javerina (Bogota), 1964*
Lucien J. Cote (also Rehabilitation Medicine). *B.S., Vermont, 1951; M.D., 1954*

Adjunct Associate Professor

Rober Traub. *B.A., Princeton, 1967; Ph.D., Massachusetts Institute of Technology, 1968; M.D., Pennsylvania, 1972*

Associate Professor of Clinical Neurochemistry

Hai Won Chang. *B.A., Ewha (Seoul), 1950; M.A., Wellesley, 1955; Ph.D., Columbia, 1961*

Associate Professors of Clinical Neurology

William G. Johnson. *B.A., Princeton, 1963; M.D., Columbia, 1967*
Richard Mayeux. *B.S., Oklahoma State, 1968; M.D., 1972*
James R. Miller. *B.A., Amherst, 1960; M.D., New York University, 1964*
C. Dominique Toran-Allerand (in International Institute for the Study of Human Reproduction). *B.A., Smith, 1955; M.D., Albany Medical College, 1959*

Associate Professor of Clinical Neuropsychology

Nancy Sabin Wexler. *B.A., Radcliffe, 1967; Ph.D., Michigan, 1970*

Associate Clinical Professors

Robert E. Barrett. *B.A., William and Mary, 1953; M.D., Medical College of Virginia, 1957*
Robert A. De Napoli. *M.D., Harvard, 1954*
Michael Fetell. *B.A., Pennsylvania, 1967; M.D., Albert Einstein College of Medicine, 1972*
Linda D. Lewis. *B.S., Bethany, 1961; M.D., West Virginia, 1965*
Joseph L. O'Brien. *M.D., Cornell, 1950*
Marcelo Olarte. *B.S., Marist Brothers, 1962; M.D., Cuyo, 1970*
Joseph H. Willner. *B.A., Hamilton, 1966; M.D., New York University, 1970*

Assistant Professors

Gary Abrams. *B.A., State University of New York (Buffalo), 1970; M.D., Pittsburgh, 1974*
Carolyn B. Britton. *B.A., Oberlin, 1968; M.S., New York University, 1975; M.D., 1975*
Robert Burke. *B.A., Dartmouth, 1971; M.D., Cornell, 1975*
Ronald G. Emerson (also Pediatrics). *B.S., Bates, 1971; M.D., New York University, 1975*
Bruce J. Fisch. *B.A., Indiana, 1974; M.D., 1978*
Joseph Herbert. *B.S., Hebrew (Jerusalem), 1975; M.D., 1975*
Dale Joseph Lange. *B.S., Siena College (Loudonville, N.Y.), 1974; M.D., New York Medical College, 1978*
Norman Latov. *B.A., Columbia, 1970; M.D., Pennsylvania, 1975; Ph.D., 1975*
Michael R. Pranzatelli. *B.S., B.A., Duquesne, 1972; M.D., Pennsylvania State, 1976*
Ariel Sherbany. *B.S., State University of New York (Stony Brook),1972 M.D., New York University, 1979; Ph.D., 1982*
Eric Alan Schon. *B.S., Columbia, 1968; M.S., Cincinnati, 1973; Ph.D., 1982*

Adjunct Assistant Professor

W. Douglas Knowles. *B.A., Reed, 1973; Ph.D., Iowa, 1978*

Assistant Professors of Clinical Neurology

Susan B. Bressman. *B.A., Barnard, 1973; M.D., Columbia, 1977*
Mitchell F. Brin. *B.A., Pennsylvania, 1975; M.D., Columbia, 1979*
Mathew E. Fink. *B.A., Pennsylvania, 1972; M.D., Pittsburgh, 1976*
Theodore A. List. *B.A., Kalamazoo, 1963; M.D., Michigan, 1967*
Steven G. Pavlakis. *B.S., Brown, 1976; M.D., 1979*
Stanley R. Resor, Jr. *B.A., Yale, 1967; M.D., Columbia, 1972*

Assistant Professor of Clinical Neuropsychology

Yaakov Stern. *B.A., Tuoro, 1975; M.A., City University of New York, 1982; Ph.D., 1983*

Assistant Clinical Professors

Frank Boschenstein. *B.A., Toronto, 1950; M.D., 1954*
Eugenia E. Gamboa. *B.A., Philippines, 1961; M.D., 1966*
Stanley W. Holstein. *B.S., George Washington, 1963; M.D., Georgetown, 1967*
Charles R. Plank. *B.A., Oklahoma, 1961; M.D., 1965*
Aaron Rabin. *B.A., Yeshiva, 1967; Ph.D., Rockefeller, 1974; M.D., Albert Einstein, 1976*
Kuldip P. Sachdev. *M.B.B.S., Agra (India), 1957; M.D., Punjab, 1962*

Associate Research Scientist

Sara Shanske. *B.A., Los Angeles, 1967; Ph.D., Albert Einstein, 1977*
Guy Valiquette. *B.A., Montreal, 1967; M.D., McGill, 1972*

SPECIAL LECTURERS
Sara Ginsberg, Ph.D.
Carmine T. Vicale, M.D.

LECTURERS
Robert E. McMasters, M.D.
Jeffrey Joel Rosen, Ph.D.

ASSOCIATES
Laura Lenihan, M.D.
Seth Pullman, M.D.
Joseph Sgro, M.D.

ASSOCIATES IN CLINICAL NEUROLOGY
Sidney M. Cohen, M.D.
Stephen Carl Klass, M.D.
Stanley Lesse, M.D.
Robert Wolff, M.D.

INSTRUCTORS IN CLINICAL NEUROLOGY
Damon N. Fellman, M.D.
Todd Sactor, M.D.
Gerald J. Smallberg, M.D.
Antonino Uncini, M.D.

At Mary Imogene Bassett Hospital

Associate Clinical Professor

Lewis L. Hamilton. *B.S., Yale, 1960; M.D., Columbia, 1964*

Assistant Clinical Professor

Mary Ann Whelan. *B.A., Radcliffe, 1961; M.A., Harvard, 1969; Ph.D., 1972; M.D., Dartmouth, 1976*

At Harlem Hospital

Professor of Clinical Neurology

John C. M. Brust, Jr. *B.A., Harvard, 1958; M.D., Columbia, 1962*

Associate Professor of Clinical Neurology

Edward B. Healton. *B.S., Oregon, 1964; M.D., Creighton*

Assistant Professor of Clinical Neurology

Alfred C. Bannerman. *B.Sc., Edinburgh, 1963; M.B., Ch.B., 1966*

Assistant Clinical Professor

Bertel Bruun. *M.D., Copenhagen, 1964*

ASSOCIATES IN CLINICAL NEUROLOGY
Stephen Carl Klass, M.D.
Bruce Roseman, M.D.

INSTRUCTORS IN CLINICAL NEUROLOGY
Rafael Borras, M.D.
Renee Malouf, M.D.

At St. Luke's–Roosevelt Hospital Center

Clinical Professor

Carl W. Braun. *B.A., Harvard, 1958; M.D., Pennsylvania*

Assistant Clinical Professor

Sidney E. Bender. *M.D., Toronto, 1962*

ASSOCIATE IN CLINICAL NEUROLOGY
Maureen S. Cafferty, M.D.

Obstetrics and Gynecology

Rappleye Professor and Chairman

Mortimer Rosen. *B.S., New York University, 1951; M.D., 1955*

At Presbyterian Hospital

Professors

Georgiana Jagiello (Virgil Damon Professor) (also Human Genetics). *B.A., Boston, 1949; M.D., Tufts, 1955*
L. Stanley James (also Pediatrics). *M.D., Otago (New Zealand), 1948*
Allan G. Rosenfield (also Public Health) (Director, Center for Population and Family Health). *B.A., Harvard, 1955; M.D., Columbia, 1959*

Professor of Biochemistry

Seymour Lieberman. *B.S., Brooklyn, 1936; M.S., Illinois, 1937; Ph.D., Stanford, 1941*

Professor of Reproductive Biochemistry

Ines Mandl. *Ph.D., Polytechnic Institute of Brooklyn, 1949*

Professor of Clinical Obstetrics and Gynecology

W. Duane Todd. *B.A., Princeton, 1948; M.D., Columbia, 1952*

Associate Professor of Physiology

Michel Ferin. *M.D., Louvain, 1964*

Associate Professors of Clinical Obstetrics and Gynecology

Bruce A. Barron. *B.A., Allegheny, 1955; Ph.D., Yale, 1965; M.D., New York University, 1971*
Edward T. Bowe. *B.S., Columbia, 1957; M.D., 1961*
Harold E. Fox (also Pediatrics). *M.Sc., Rochester and Oxford, 1972; M.D., Rochester, 1972*
Wylie C. Hembree III (also Medicine). *B.A., Vanderbilt, 1960; M.D., Washington (St. Louis), 1964*
Raphael Jewelewicz. *M.D., Hebrew (Jerusalem), 1960*
Richard U. Levine. *B.S., Tufts, 1962; M.D., Cornell, 1966*
Jack E. Maidman. *B.S., California (San Francisco), 1958; M.D., 1962*

Associate Clinical Professors

Vincent J. Freda. *B.A., Columbia, 1948; M.D., New York University, 1952*
Raymond M. McCaffrey. *B.A., Fordham, 1954; M.D., Cornell, 1958*
Ming-Neng Yeh. *M.D., National Taiwan, 1964*

Research Scientist

Inge Dyrenfuth. *D.Sc., Heidelberg, 1947*

Assistant Professors

Laxmi Baxi. *M.D., Seth G.S. Medical College (Bombay), 1962*
Jye-Siung Fang. *B.S., National Taiwan, 1962; Ph.D., Kansas State, 1971*
Frederick A. Gonzalez. *B.S., Boston, 1972; M.D., Columbia, 1976*

Amalia C. Kelly. *B.A., Bard, 1975; M.D., Tufts, 1979*
Phyllis C. Leppert (also Pediatrics). *M.S., Columbia, 1964; M.D., Duke, 1976*
Jen-ta Shen. *M.D., National Taiwan, 1970; Ph.D., California (San Francisco), 1975*
Pamela Joan Tropper. *B.A., Brandeis, 1972; M.D., Columbia, 1977*
Carolyn L. Westhoff. *B.S., Michigan, 1972; M.D., 1977*

Assistant Professors of Clinical Obstetrics and Gynecology

Nabil Wafik Husami. *B.S., M.D., American (Beirut), 1972*
Andrew Loucopoulos. *M.D., Athens, 1970*
Elynne Margulis. *B.S., Yale, 1974; M.D., Columbia, 1978*
Kevin B. Reilly. *B.S., Fairfield (Connecticut), 1965; M.D., Michigan, 1965*
Sylvia P. Rubin. *B.A., New York University, 1967; M.Sc., Sarah Lawrence, 1972*

Assistant Clinical Professors

Marvin T. Grody. *B.A., Pennsylvania, 1943; M.D., 1946*
Claudia Holland. *B.A., Harvard, 1977; M.D., Mt. Sinai, 1981*
Anita Parnes La Sala. *B.A., Radcliffe, 1976; M.D., Columbia, 1980*
Wolfgang Tretter. *M.D., Heidelberg, 1952*

Associate Research Scientists

Agit K. Ghosh. *Ph.D., Calcutta, 1978*
Veeramac K. Prasad. *B.S., Loyola (Madras), 1970; Ph.D., City University of New York, 1979*

SPECIAL LECTURERS
Henry Clay Frick II, M.D.
David B. Moore, M.D.
Equinn Munnell, M.D.
Sidney J. Siegel, M:D.

LECTURERS
Richard A. Bronson, M.D.
Arnold N. Fenton, M.D.
John L. Lewis, Jr., M.D.
Kevin D. Reilly, M.D.
David L. Rosenfeld, M.D.

ASSOCIATE IN CLINICAL OBSTETRICS AND GYNECOLOGY
Lawrence J. Severino, M.D.

INSTRUCTORS IN CLINICAL OBSTETRICS AND GYNECOLOGY
Paul Richard Gindoff, M.D.
Unjeria C. Jackson, M.D.
Christina M. Ruegsegger, M.D.
Varsha Kishore Saraf, M.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professors

Douglas H. Barns. *B.S., St. Lawrence, 1950; M.D., Cornell, 1954*
Mark Elliott Heller. *B.A., Lehigh, 1969; M.D., State University of New York (Buffalo), 1973*
Balazs Selendy. *M.D., Louvain (Belgium), 1964*

At Harlem Hospital

Professor of Clinical Obstetrics and Gynecology

Solan Chao. *B.A., Cornell, 1954; M.D., Columbia, 1962*

Associate Professor of Clinical Obstetrics and Gynecology

Hiroko T. Felton. *M.D., Kansai (Japan), 1955*

Associate Clinical Professor

Stephen L. Matseoane. *B.S., Fort Hare (South Africa), 1954; M.D., Witwatersran (South Africa), 1959*

Assistant Professors of Clinical Obstetrics and Gynecology

Sunthorn Bunyaviroch. *B.S., Chulalongkorn (Thailand), 1960; M.D., Siriraj Hospital, 1964*
Young Sook Cho. *M.B., Yonsei, 1955; M.D., 1959*
Nomenida A. Lazaro. *B.S., Santo Tomas (Philippines), 1960; M.D., 1965*
Esther Suarez. *A.A., Santo Tomas (Philippines), 1955; M.D., 1960*
Alfred J. Williams. *B.A., Howard, 1960; M.D., Meharry, 1964*

Assistant Clinical Professor

Pisan Unchalipongse. *M.D., Chiengma Medical School (Thailand), 1965*

INSTRUCTORS IN CLINICAL OBSTETRICS AND GYNECOLOGY
Kwadwo Boakye, M.D.
Kok Chung Chang, M.D.
Sitaram Vithal Chitnis, M.D.
Hasi Das, M.D.
Phyllis Janice Gee, M.D.
Machelle Alma Harris, M.D.

INSTRUCTORS *(continued)*
Ashalatha Mital, M.B., B.S.
Thomas Murray, M.D.
Rajasingham Rahulatharan, M.D.
Jacques Pierre Stassart, M.D.
Violeta Valdez, M.D.
Deborah White, M.D.

At Morristown Memorial Hospital

Associate Professor of Clinical Obstetrics and Gynecology

Abraham Risk. *M.D., Dalhousie (Canada), 1957; M.P.H., Johns Hopkins, 1969*

At St. Luke's–Roosevelt Hospital Center

Professor

Robert S. Neuwirth (F. Huntington and Dorothy Babcock Professor). *B.S., Yale, 1955; M.D., 1958*

Professor of Clinical Obstetrics and Gynecology

Harold M. M. Tovell. *B.A., Toronto, 1951; M.D., 1955*

Associate Professor of Clinical Obstetrics and Gynecology

Michelle P. Warren (also Medicine). *B.A., Mt. Holyoke, 1961; M.D., Cornell, 1965*

Associate Clinical Professor

Hussein K. Amin. *M.B., Ch.B., Alexandria (Egypt), 1955*
Mamdough Moukhtar. *M.D., Ainshams (Cairo), 1955; M.A., B.S.C., Oxford, 1964*

Research Scientist

Muriel Feigelson. *Ph.D., New York University, 1961*

Assistant Professors

Daniel Clement. *D.E.C. Md. Sci., College Salaberry-de-Valleyfield (Canada), 1971; M.D., Montreal, 1976*
Maureen Killackey. *B.A., Barnard, 1974; M.D., Cornell, 1978*

Assistant Professors of Clinical Obstetrics and Gynecology

Ernst G. Bartsich. *M.D., Frankfort, 1962*
Terusada Horiguchi. *M.D., Keio (Tokyo), 1961*
Haldar H. Shamsi. *M.B.B.S., King Edward Medical College (Pakistan), 1965*
Ivan K. Strausz. *M.B., Ch.B., Capetown, 1958*

Assistant Clinical Professors

Alexander Coman. *M.D., Institute of Medicine and Pharmacy (Rumania), 1948*
David B. Crawford. *B.S., North Carolina, 1943; M.D., New York University, 1946*
Ivan J. Jacobson. *B.A., Belgrade (Yugoslavia), 1948; M.D., 1955*
Gyula Nemes. *B.A., Gymn. Szekesfehervar, 1946; M.D., Budapest, 1954*
Marcia L. Storch. *B.A., Bryn Mawr, 1955; M.D., Woman's Medical College of Pennsylvania, 1973*
Ian G. Van Praagh. *M.D., Toronto, 1955*
Riley W. Waller. *B.S., LeMoyne, 1943; M.D., Howard, 1947*

LECTURERS
Naif K. Basile, M.D.
Charles H. Debrovner, M.D.
Roger Hassid, M.D.
Andre Nehorayoff, M.D.
Richard A. Ruskin, M.D.
Fouad Surur, M.B.B.Ch.

ASSOCIATE IN CLINICAL OBSTETRICS AND GYNECOLOGY
Bernardo Handszer, M.D.

INSTRUCTORS IN CLINICAL OBSTETRICS AND GYNECOLOGY
Nargess Ahgharian, M.D.
Patricia Yarberry Allen, M.D.
Terry L. Andrews, M.D.
Howard Balick, M.D.
Felipe Bozzo, M.D.
John Clark, M.D.
Satwant Kaur Dhamoon, M.R.C.O.G.
Paul Filipescu, M.D.
Henry Freuman, M.D.
Susan L. Grant, M.D.
Amtul R. Hussein, M.D.

INSTRUCTORS *(continued)*
Joseph Iwanicki, M.D.
John Jakus, M.D.
Juanita Jenyons, M.D.
Jay Joel Kelinson, M.D.
E. Nicholas Klein, M.D.
Lawrence D. Kramer, M.D.
Leon Lewenstein, M.D.
Richard M. Lumiere, M.D.
Karlheinz Moehlen, M.D.
Ezatolah Mohajer-Shojai, M.D.
Alan Morris, M.D.
Lillian D. Nash, M.D.
Rosemarie C. Newman, M.D.
Diana Oquendo, M.D.
Adamandia Panayotopoulos, M.D.
Benu Pascariu, M.D.
Vicar Qureshi, M.D.
George S. Radney, M.D.
Ronald J. Reiss, M.D.
Irving Ward Robinson, M.D.
Arnold Roufa, M.D.
Peter S. Sailon, M.D.
Claudia Useda, M.D.
Mary E. Wilson, M.D.

Ophthalmology

Edward S. Harkness Professor and Chairman

Charles J. Campbell. *M.D., George Washington, 1948; B.S., Muskingum, 1949; M.S., Rochester, 1951*

At Presbyterian Hospital

Professors

Endre A. Balazs (Malcolm P. Aldrich Professor). *M.D., Budapest, 1942*
Peter Gouras. *B.A., Johns Hopkins, 1951; M.D., 1955*

Professor of Ocular Physiology

Laszlo Z. Bito. *B.A., Bard, 1959; Ph.D., Columbia, 1963*

Professor of Ophthalmic Biochemistry

Abraham Spector. *Ph.D., New York University, 1957*

Professor of Physiology

Jorge Fischbarg. *M.D., Buenos Aires, 1962; Ph.D., Chicago, 1971*

Professors of Clinical Ophthalmology

Max Forbes. *B.A., Cornell, 1951; M.D., Chicago, 1957*
Frederick A. Jakobiec. *B.A., Harvard, 1964; M.D., 1968*
Francis A. L'Esperance, Jr. *B.A., Dartmouth, 1952; M.D., Harvard, 1956*
Harold F. Spalter. *B.A., Brown, 1951; M.D., Columbia, 1955*
Stephen Trokel. *B.A., Cornell, 1954; M.S., Rochester, 1956; M.D., 1969; Med.Sci.D., Columbia, 1965*

Clinical Professor

Anthony Donn. *B.S., Yale, 1947; M.D., Columbia, 1952*

Associate Professor of Radiation Biology

Basil V. Worgul. *B.S., Miami, 1969; Ph.D., Vermont, 1974*

Associate Professors of Clinical Ophthalmology

Myles M. Behrens. *B.A., Yale, 1958; M.D., Columbia, 1962*
Richard W. Darrell. *B.A., Harvard, 1955; M.D., 1959; Sc.D., Columbia, 1965*
Andrew deRoetth, Jr. *B.S., Northwestern, 1943; M.D., 1946*
R. Linsy Farris. *M.D., Duke, 1961*
Sally Moore (Orthoptics). *B.S., Delaware, 1952*
Balachandran D. Srinivasan. *Ph.D., Columbia, 1964; M.D., 1967*
Lawrence Yannuzzi. *B.A., Harvard, 1959; M.D., Boston, 1964*

Associate Professor of Biophysical Ophthalmology

Charles J. Koester. *B.S., Carnegie Institute of Technology, 1950; Ph.D., Rochester, 1955*

Associate Clinical Professors

Brian C. Curtin. *B.S., Fordham, 1942; M.D., New York University, 1945*
Jack M. Dodick. *M.D., Toronto, 1963*
John W. Espy. *B.A., Franklin and Marshall, 1953; M.D., Cornell, 1956*
Frank B. Hoefle. *B.A., Dartmouth, 1957; M.D., Harvard, 1961*
George M. Howard. *B.A., Dartmouth, 1952; M.D., Albany, 1959*
David Sudarsky. *B.S., Yale, 1946; M.D., 1949*
Arnold I. Turtz. *M.D., New York University, 1948*

Research Scientists

James P. Dillon. *B.S., Canisious College, 1964; M.S., Columbia, 1973; Ph.D., 1974*
Kasimierz Malinowski. *M.S., Medical Academy (Warsaw), 1965; Ph.D., Polish Academy of Sciences, 1969*

Assistant Professors

William H. Garner. *B.A., Indiana, 1970; Ph.D., 1974*
Larry Liebovitch. *B.S., City College of New York, 1972; M.A., Harvard, 1973; Ph.D., 1978*

Assistant Professor of Ophthalmic Pharmacology

Prasad S. Kulkarni. *B.S., Shivaji (India), 1965; M.S., State University of New York (Downstate), 1971; Ph.D., 1974*

Assistant Professors of Clinical Ophthalmology

Howard M. Eggers. *B.A., Columbia, 1967; M.D., 1971*
Arnold W. Forrest. *B.A., Columbia, 1939; M.D., New York University, 1942*
Emil Wirostko. *B.S., Fordham, 1956; M.D., Cornell, 1960; Sc.D., Columbia, 1967*

Assistant Clinical Professors

Albert Hofeldt. *B.LS., Portland State, 1965; M.D., Oregon, 1969*
William James, Jr. *B.A., Princeton, 1960; M.D., Columbia, 1965*
Rainer N. Mittl. *M.D., Munich, 1964*
Hugh M. Moss. *B.A., Harvard, 1952; M.D., Pennsylvania, 1954*
Louis D. Pizarello. *B.A., Colgate, 1971; M.P.H., Harvard, 1974; M.D., Virginia, 1975*

Associate Research Scientists

Raul Oscar Chiesa. *B.S., Instituto Alberto Brause (Uruguay), 1971; M.D., Universidad de las Republica (Uruguay), 1980*
Mary T. Flood. *B.S., Dominican (New York), 1968; M.S., New York University, 1972; Ph.D., 1976*
Margaret H. Garner. *B.S., Marietta, 1967; M.S., Indiana, 1969; Ph.D., 1974*
James E. Haley. *B.S., Wagner, 1967; M.S., C. W. Post, 1970; Ph.D., St. John's, 1973*
Jan Koniarek. *B.S., Manhattan, 1971*
Wolf Krebs. *V.M.D., Freie (Berlin, West Germany), 1968*
Lu-ku Li. *B.S., National Taiwan, 1958; Ph.D., Princeton, 1964*
Martin McDermott. *B.S., St. Francis (Loretto, Pa.), 1972; M.S., St. John's (New York), 1974; Ph.D., Rhode Island, 1983*
Cecily Medvedosky. *M.D., Tashkent Medical Institute, 1942; Ph.D., Institute for Industrial Hygiene and Occupational Diseases, 1964*

Adjunct Associate Research Scientist

John M. Camisa. *B.A., St. Francis (New York), 1974; M.S., Northwestern, 1977; Ph.D., 1978*

SPECIAL LECTURERS
Frank M. Carroll, M.D.
George R. Merriam, M.D.
Karl Meyer, M.D. (also Biochemistry)

LECTURERS
Frank Di Benedetto, Ph.D.
Julius A. Vida, Ph.D.

ASOCIATE IN CLINICAL OPHTHALMOLOGY
Martin Leib, M.D.

INSTRUCTORS IN CLINICAL OPHTHALMOLOGY
Lisa Barber, M.D.
Cynthia MacKay, M.D.
Jeffrey G. Odel, M.D.
Lawrence G. Pape, M.D.
Jaime Santamaria III, M.D.
R. Theodore Smith, M.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professor

Thomas A. Farell. *B.A., Hamilton, 1957; M.D., McGill, 1961*

ASSOCIATE IN CLINICAL OPHTHALMOLOGY
Charles B. Deichman. M.D.

At Harlem Hospital

Assistant Professor of Clinical Ophthalmology

Herman C. Jordan. *B.A., Colgate, 1954; M.D., Howard, 1964*

INSTRUCTORS IN CLINICAL OPHTHALMOLOGY
Antonio M. Gonzalez, M.D.
John P. Mitchell, M.D.
Ram P. Tiwari, M.S.

At St. Luke's–Roosevelt Hospital Center

Associate Clinical Professor

James C. Newton. *B.S., Fordham, 1949; Ph.D., 1953; M.D., Jefferson, 1957*

LECTURER
Dennis Freilich, M.D.

ASSOCIATES IN CLINICAL OPHTHALMOLOGY
Chin Wing Chu, M.D.
John Eden, M.D.

INSTRUCTORS IN CLINICAL OPHTHALMOLOGY
Louis V. Angioletti, Jr., M.D.
Bernard J. Fowler, M.D.
Charles Merker, M.D.
Chalempong Sarakhun, M.D.
Howard K. Weisberg, M.D.

Orthopedic Surgery

Frank Stinchfield Professor and Chairman

Harold M. Dick. *B.A., Princeton, 1956; M.D., New York University, 1960*

At Presbyterian Hospital

Professors of Clinical Orthopedic Surgery

Nas Ser Eftekhar. *M.D., Teheran, 1960*
S. Ashby Grantham. *B.A., Washington (St. Louis), 1952; M.D., 1955*
Charles S. Neer II. *B.A., Dartmouth, 1939; M.D., Pennsylvania, 1942*

Professor of Clinical Pathology

Austin D. Johnson. *B.A., Columbia, 1945; M.D., 1947*

Professor of Mechanical Engineering and Orthopedic Bioengineering

Van C. Mow. *B.A.E., Rensselaer, 1962; Ph.D., 1966*

Associate Professor of Anatomy and Cell Biology

Stephen Bruce Doty. *B.A., Rice, 1961; M.A., 1963; Ph.D., 1965*

Associate Professor of Clinical Orthopedic Surgery

Hugo A. Keim. *B.S., St. Mary's (Minnesota), 1956; M.S., Northwestern, 1966; M.D., Loyola, 1960*

Associate Clinical Professors

David L. Andrews. *B.A., Williams, 1952; M.D., Columbia, 1956*
John R. Denton. *B.S., U.S. Military Academy, 1960; M.D., Medical College of Alabama, 1967*
Rosamond Kane. *B.A., Bryn Mawr, 1948; M.D., Columbia, 1952*

Assistant Professors

Louis U. Bigliani. *B.A., Holy Cross (Massachusetts), 1968; M.D., Loyola, 1972*
Michael Aloysius Kelly. *B.A., North Carolina, 1974; M.D., Georgetown, 1979*
Stephen J. McIlveen. *B.S., Fairleigh Dickinson, 1969; M.D., New York University, 1973*
Christopher B. Michelson. *B.A., Bowdoin, 1961; M.D., Columbia, 1969*
Melvin P. Rosenwasser. *B.A., Johns Hopkins, 1972; M.D., Columbia, 1976*
David Price Roye, Jr. *B.A., Oklahoma, 1971; M.D., Columbia, 1975*

Assistant Professors of Clinical Orthopedic Surgery

Jean-Pierre C. Farcy. *M.D., Aix-Marseille, 1972*
Howard A. Kiernan, Jr. *B.S., Holy Cross, 1962; M.D., New York University, 1966*

Assistant Clinical Professors

Peter Carbonara. *B.A., Columbia, 1953; M.D., Boston, 1957*
Merle H. Katzman. *B.S., Trinity (Connecticut), 1950; M.D., Jefferson Medical College, 1954*
Harvey Orlin. *M.D., State University of New York (Downstate), 1961*
Robert M. Reiss. *B.A., Columbia, 1951; M.D., 1959*
Thomas Rodda. *B.A., King's College (Pennsylvania), 1957; M.D., Loyola, 1961*

Joseph E. Salvatore. *M.D., Hahneman, 1955; M.S., Tennessee, 1962*
Martin L. Sorger. *B.A., Hamilton, 1956; M.D., Columbia, 1960*
Ronald Tietjen. *B.S., Ursinus (Pennsylvania), 1968; M.D., New York University, 1972*

Assistant Professor of Orthopedic Biomechanics

Robert W. Pawluk. *B.S., Columbia, 1974; M.B.A., 1977*

Associate Research Scientist

Robert James Foster. *B.A., Cooper Union, 1973; M.E., Columbia, 1974; Sc.D., 1982*

SPECIAL LECTURERS
C. Andrew L. Bassett, M.D.
Frank E. Stinchfield, M.D.

ASSOCIATES IN CLINICAL ORTHOPEDIC SURGERY
Robert N. Dunn, M.D.
David M. Smith, M.D.

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY
Steven Berkowitz, M.D.
Michael J. Bronson, M.D.
Stuart J. Fischer, M.D.

INSTRUCTORS *(continued)*
Richard E. Fleming, Jr., M.D.
Craig Richard Foster, M.D.
Charles B. Goodwin, M.D.
Armen C. Haig, M.D.
James S. Kort, M.D.
Lawrence A. Lefkowitz, M.D.
Francis X. Mendoza, M.D.
Thomas A. Rago, M.D.
E. Baldwin Self, Jr., M.D.
Harvey S. Sicherman, M.D.
William T. Stillwell, M.D.
Francis F. Tarsney, M.D.

At Harlem Hospital

Associate Professor of Clinical Orthopedic Surgery

Marvin L. Shelton. *B.S., Howard, 1951; M.D., 1956*

At Mary Imogene Bassett Hospital

INSTRUCTOR IN CLINICAL ORTHOPEDIC SURGERY
Franklin Lynch, Jr., M.D.

At Helen Hayes Hospital

Professor of Clinical Orthopedic Surgery

George Van B. Cochran. *B.A., Dartmouth, 1953; M.D., Columbia, 1956; Med.Sc.D., 1957*

Associate Clinical Professor

Raphael K. Levine. *B.A., Brandeis, 1961; M.D., Jefferson, 1965*

Associate Research Scientists

Martin W. Ferguson-Pell. *B.S., Exeter (United Kingdom), 1973; Ph.D., Strathclyde (Glasgow), 1977*
Marvin W. Johnson. *M.S., Illinois, 1972; Ph.D., 1977*
Murali P. Kadaba. *M.S., Cincinnati, 1972; Ph.D., Kentucky, 1978*
Frederick Vosburgh. *B.A., Duke, 1972; Ph.D., 1978*

ASSOCIATE IN CLINICAL ORTHOPEDIC SURGERY
Robert L. S. Boothe, M.D.

INSTRUCTOR IN CLINICAL ORTHOPEDIC SURGERY
John W. Carmody, M.D.

At St. Luke's–Roosevelt Hospital Center

Professor of Clinical Orthopedic Surgery

Joseph W. Fielding. *M.D., Toronto, 1946*

Clinical Professor

Robert E. Zickel. *B.A., Cornell, 1952; M.D., 1958*

Assistant Clinical Professors

Vincent J. Fietti, Jr. *B.A., Boston, 1968; M.D., 1972*
William G. Hamilton. *B.S.E., Princeton, 1954; M.D., Columbia, 1964*
Frederic E. Helbig. *B.A., Brown, 1964; M.D., Boston, 1969*
Tarek Hisham Mardam-Bey. *M.D., American (Beirut), 1972*
Ronald M. Match. *B.A., Hofstra, 1953; M.D., Jefferson, 1957*
James C. Parkes II. *B.A., Dartmouth, 1957; M.D., Harvard, 1961*
Andrew H. Patterson. *B.A., North Carolina, 1954; M.D., Columbia, 1958*
George L. Unis. *B.A., New York University, 1960; M.D., New Jersey College of Medicine and Dentistry, 1975*

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY
Richard J. Cea, M.D.
Sanford A. Ratzan, M.D.
Francesca Thompson, M.D.
Luther F. Warren, M.D.

Otolaryngology

Professor and Chairman

Maxwell Abramson. *B.A., Wesleyan, 1957; M.D., Union (Albany), 1961*

At Presbyterian Hospital

Professor of Auditory Biophysics

Shyam K. Khanna. *B.Sc., Lucknow (India), 1951; D.R.E., St. Xaviers (Bombay), 1951*

Professors of Clinical Otolaryngology

Andrew Blitzer (also Oral Surgery). *B.A., Adelphi, 1966; D.D.S., Columbia, 1970; M.D., Mt. Sinai School of Medicine (New York), 1973*
Robert M. Hui. *B.A., Southern California, 1943; M.D., 1946*

Professor of Clinical Audiology and Speech Pathology

Thomas H. Fay. *B.A., Florida, 1949; M.A., Columbia, 1950; Ph.D., Illinois, 1958*

Clinical Professors

Lawrence Savetsky. *B.A., New York University, 1951; M.D., State University of New York (Downstate), 1955*
Malcolm H. Schvey. *B.A., Lehigh, 1947; M.A., Columbia, 1950; M.D., Amsterdam, 1956*

Associate Professor of Clinical Otolaryngology

Cheng Chun Huang. *B.S., Taiwan, 1963; M.S., Vanderbilt, 1966; Ph.D., Iowa, 1970*

Associate Clinical Professor of Dentistry

John D. Piro (Prosthetics). *B.A., Fordham, 1943; D.D.S., Columbia, 1946*

Assistant Professors

Soly Baredes. *B.A., Columbia, 1972; M.D., 1976*
Jack Joseph Wazen. *B.S., American (Beirut), 1974; M.D., 1978*

Assistant Professors of Clinical Otolaryngology

Lee David Eisenberg (in Surgery). *B.S., St. John's (New York), 1967; M.D., State University of New York (Downstate), 1971*
Judith Jay. *B.A., Wesleyan, 1974; M.D., Hahnemann, 1979*
Barry M. Shapiro. *State University of New York (Stony Brook), 1971; D.M.D., Harvard, 1975; M.D., Mt. Sinai, 1978*

Assistant Clinical Professors

Hyun T. Cho. *M.D., Korea, 1964*
Raymond B. Strauss. *B.A., Washington (St. Louis), 1950; Ph.D., Florida, 1956; M.D., Western Reserve, 1968*

Adjunct Associate Research Scientist

Jonathan B. Allen. *B.S., Illinois, 1966; M.S., Pennsylvania, 1968; Ph.D., 1970*

INSTRUCTORS IN CLINICAL OTOLARYNGOLOGY
David Abraham, M.D.
Michael Francis Angel, M.D.
Paul J. Carniol, M.D.
Anthony Caruso, M.D.
Vincent G. Caruso, M.D.
Jason P. Cohen, M.D.
Kenneth F. Garay, M.D.
Daniel J. Pender, M.D.
Nicholas D. Pontilena, M.D.
Robert L. Russo, M.D.
David S. Schuster, M.D.
Peter D. Westerhof, M.D.

At Harlem Hospital

Associate Clinical Professor

Errol A. Thompson. *M.B., University College (Dublin), 1936*

At St. Luke's–Roosevelt Hospital Center

Associate Clinical Professor

John S. Lewis. *M.D., Alberta (Canada), 1953*

Assistant Clinical Professors

Tay Bong Lee. *M.D., Seoul National, 1962*
Walter H. Stingle. *B.A., Columbia, 1965; M.D., 1969*

INSTRUCTORS IN CLINICAL OTOLARYNGOLOGY
Arshad H. Amjad, M.D.
Maria Aramburu, M.D.
Neville W. Carmical, M.D.
James F. Grillo, M.D.
Alan Jacobson, M.D.
Edward M. Lane, M.D.
Pi-Tang Lin, M.D.
L. Nicole Moulin, M.D.
Dev Das Panigrahi, M.B.B.S.
Mauriciu Rodescu, M.D.

Pathology

Associate Professor and Acting Chairman

John J. Fenoglio, Jr. *B.A., Harvard, 1965; M.D., Georgetown, 1969*

At Presbyterian Hospital

Professors

Richard Axel (also Eugene Higgins Professor of Biochemistry). *B.A., Columbia, 1967; M.D., Johns Hopkins, 1970*
William A. Blanc. *B.A., Geneva, 1940; M.D., 1947; Ph.D., 1952*
Paul Ellner (also Microbiology). *M.S., Southern California, 1952; Ph.D., Maryland, 1956*
Gabriel C. Godman (also Microbiology). *B.A., New York University, 1941; M.D., 1944*
Ralph M. Richart. *B.A., Johns Hopkins, 1954; M.D., Rochester, 1958*
Virginia Tennyson (also Anatomy and Cell Biology). *B.S., Pennsylvania State, 1946; M.S., Baylor, 1956; Ph.D., Columbia, 1960*

Professor of Surgical Pathology

Luciano Ozzello. *M.D., Turin, 1951*

Adjunct Professors

S. Raymond Gambino. *B.S., Antioch, 1948; M.D., Rochester, 1952*
Robert V. Hutter. *B.A., State University of New York (Syracuse), 1950; M.D., 1954; M.A., Yale, 1958*
Harry L. Ioachim. *M.D., Bucharest, 1949*
Sidney Pestka. *B.A., Princeton, 1957; M.D., Pennsylvania, 1961*

Professors of Clinical Pathology

Carmia Borek (in Radiology). *B.S., M.S., Ph.D., Weitzmann Institute (Israel), 1967*
Austin D. Johnston (in Orthopedic Surgery). *B.A., Columbia, 1945; M.D., 1947*

Armand F. Miranda. *B.S., Columbia, 1969; Ph.D., 1973*
Nicole Suciu-Foca (in Surgery). *B.S., Bucharest (Rumania), 1959; M.S., 1960; Ph.D., 1965*

Professor of Clinical Surgical Pathology

Karl Perzin. *B.A., Columbia, 1954; M.D., 1958*

Clinical Professors

Pablo Rubinstein. *M.D., Chile, 1962*
Sheldon C. Sommers. *M.D., Harvard, 1941*

Clinical Professor of Oral Pathology

Melvin N. Blake. *B.S., Massachusetts, 1951; D.D.S., New York University, 1955*

Adjunct Clinical Professor

Jan Vincent Johannesen. *M.D., Bergen (Norway), 1966*

Associate Professor

Ah-Kau Ng (in Surgery). *B.A., National Chung Hsing (Taiwan), 1969; M.D., State University of New York (Plattsburgh), 1972; Ph.D., Temple, 1975*

Associate Professors of Neuropathology

Lester M. Geller. *B.A., Cornell, 1947; M.A., Michigan State, 1948; Ph.D., New York University, 1953*
Mavis Kaufman (in Psychiatry). *M.D., New York Medical College, 1944*

Associate Professor of Clinical Neuropathology

Richard S. Defendini. *B.A., Michigan, 1948; M.A., 1952; M.D., Rochester, 1961*

Associate Professors of Clinical Pathology

Thomas A. Blumenfeld. *A.A., North Carolina, 1960; M.D., Tennessee, 1964*
Reba M. Goodman. *B.A., Indiana, 1949; M.A., Columbia, 1953; Ph.D., 1956*
Ricardo Mesa-Tejada. *B.S., Manhattan, 1964; M.D., Madrid, 1970*
Michael Pesce. *B.S., St. Johns, 1967; Ph.D., 1971*

Adjunct Associate Professors

Ernest Baden. *M.A., Sorbonne, 1946; D.D.S., New York University, 1950; M.D., Geneva, 1962*
Lewis Allen Johnson. *B.A., Minnesota, 1951; M.D., 1955*
M. Richard Pachter. *M.D., Zurich, 1956*
Robert R. Rickert. *B.A., Michigan, 1958; M.D., Johns Hopkins, 1962*
John A. Terzakis. *B.A., Columbia, 1957; M.D., New York University, 1961*
Kaity Yannopoulos. *M.D., Greece, 1954*
Frederick T. Zugibe. *B.S., St. Francis, 1951; M.S., Chicago, 1959; Ph.D., 1960*

Associate Clinical Professors

Irwin A. Almenoff. *B.S., College of the City of New York, 1948; M.D., Cornell, 1952*
Daniel W. Benninghoff. *B.A., Yale, 1949; M.D., Columbia, 1953*
Donald E. Brown. *M.D., Harvard, 1943*
John M. Budinger. *B.S., Northwestern, 1950; M.D., 1954*
Robert L. Hirsch. *B.A., Cornell, 1947; M.D., 1951*
Artemis D. Nash. *B.A., Smith, 1949; M.D., Columbia, 1953*

Stanley Simbonis. *B.S., Yale, 1953; M.D., 1957*
Richard L. Swarm. *B.A., Washington (St. Louis), 1949; M.D., 1950*

Adjunct Associate Clinical Professor

Majid Ali. *M.B.B.S., Punjab (India), 1963*

Associate Clinical Professor of Neuropathology

Nicholas J. Willson (in Psychiatry). *B.S., Saint Peter's, 1959; M.D., Seton Hall, 1963*

Assistant Professors

Carole Louise Berger (also Dermatology). *B.S., City College of New York, 1966; M.A., Columbia, 1971; M.S., 1974; Ed.D., 1976*
James S. Brassel. *B.A., Holy Cross, 1968; M.D., Tufts, 1973*
Jerome Owen Cantor. *B.A., Columbia, 1971; M.D., Pennsylvania, 1975*
John H. Chow. *B.S., Columbia, 1976; M.D., 1980*
Christopher P. Crum. *B.A., Virginia, 1970; M.D., 1974*
Vivette Denise D'Agati. *B.A., Yale, 1975; M.D., New York University, 1979*
Margaret M. Grimes. *B.A., Rosemont (Pennsylvania), 1971; M.D., New York Medical College, 1975*
Stephen Keller. *B.S., City College of New York, 1953; M.S., St. John's, 1955; Ph.D., Rutgers, 1959*
William Joseph Kupsky. *B.S., Massachusetts Institute of Technology, 1974; M.D., Harvard, 1978*
Jay Lefkowitch. *B.A., Clark, 1972; M.D., Columbia, 1976*
Charles C. Marboe. *B.A., Princeton, 1971; M.D., Pennsylvania State, 1976*
Merlin D. Marquardt (in Ophthalmology). *B.S., Wisconsin, 1967; M.D., 1971*
Kathleen Mary O'Toole. *B.S., Fordham, 1974; M.D., Albert Einstein, 1978*
Janet Tannenbaum. *B.A., Brandeis, 1969; M.Phil., Columbia, 1974; Ph.D., 1975*
Philip C. Ursell. *B.A., Haverford, 1972; M.D., Columbia, 1976*

Assistant Professors of Clinical Neuropathology

Herbert Barden. *B.S., Brooklyn, 1952; M.S., New York University, 1960; Ph.D., 1964*
Arthur P. Hays. *B.A., Dartmouth, 1962; Med.Sci.D., 1963; M.D., Colorado, 1966*

Assistant Professors of Clinical Pathology

E. Glenn Armstrong (in the Center for Clinical Research). *B.S., Virginia Polytechnic Institute, 1966; M.S., 1969; Ph.D., Maryland, 1975*
Joseph M. Ceretta. *B.S., Fordham, 1969; M.S., 1971; Ph.D., 1976*
Thomas Landes Clemens. *B.A., Goshen (Indiana), 1973; M.S., Penn State, 1975; Ph.D., London, 1980*
Margaret Collins. *B.S., Fordham, 1972; M.D., Georgetown, 1977*
Daniel J. Fink. *B.S., Cornell, 1968; M.S., Massachusetts Institute of Technology, 1970; M.D., Columbia, 1975; M.Phil., 1980*
Seth Goldberg. *B.S., Massachusetts Institute of Technolgoy, 1966; M.D., State University of New York (Downstate), 1970*
May Parisien. *M.D., State University (Port-au-Prince), 1966*
Gerda Nette. *B.S., Columbia, 1968; Ph.D., 1973*
Philip Tomashefsky (in Urology). *Ph.D., New York University, 1969*

Assistant Clinical Professors

Lucretia Allen. *B.A., New York University, 1948; M.D., State University of New York (Downstate), 1952*
Stefan D. Epstein. *B.A., Columbia, 1956; M.D., State University of New York (Buffalo), 1960*
Hiroshi Nakazawa. *M.D., Keio (Tokyo), 1958*
Mohamed Osman. *D.V.M., Cairo, 1967; Ph.D., Columbia, 1983*

Henry G. Shriever. *B.A., Vermont, 1956; M.D., New York Medical College, 1960*
Ralph W. Snyder. *B.S., McGill, 1951; M.D., 1953*
Heldrun Zweitnig-Rotterdam. *M.D., Munich, 1968*

Assistant Clinical Professor of Neuropathology

Michael Kogan. *B.A., Miami (Florida), 1964; B.S., 1967; Ph.D., Virginia Polytechnic Institute, 1972*

Adjunct Assistant Professors

Solange G. Abunassar. *M.D., American (Beirut), 1968*
Paul Bachner. *B.A., College of the City of New York, 1959; M.D., Columbia, 1963*
Larry E. Douglass. *B.A., Washington (St. Louis), 1959; M.D., Vanderbilt, 1960*
Howard B. Goldstein. *B.A., Colgate, 1955; M.D., Albany Medical College, 1959*
Arthur I. Hurvitz. *D.V.M., Michigan State, 1964; Ph.D., California (Davis), 1967*
Paul A. Krieger. *B.S., College of the City of New York, 1967; M.D., New York Medical College, 1971*
Richard A. McReynolds. *M.S., Virginia, 1968; M.D., 1971*
Robert D. Newman. *B.S., California (Los Angeles), 1958; M.D., 1962*
Joseph E. O'Brien. *B.A., Columbia, 1957; M.D., State University of New York (Downstate), 1961*
Carolyn M. Salafia. *B.A., Dartmouth, 1976; M.D., Duke, 1980.*
Maria Shevchuk. *B.A., Fordham, 1970; M.D., State University of New York (Syracuse), 1974*

Adjunct Assistant Professor of Neuropathology

Andrew J. Dwork. *B.A., Columbia, 1973; M.D., New Jersey Medical School, 1977*

SPECIAL LECTURERS
Lester R. Cahn, M.D.
David Cowen, M.D.
C. Zent Garber, M.D.
Raffaele Lattes, M.D.
Conrad Pirani, M.D.
Leon Roizin, M.D.

SPECIAL LECTURER IN SURGICAL PATHOLOGY
D. Keith McElroy, M.D.

LECTURERS
Michael Baden, M.D.
Paul A. Brown, M.D
Hyman Donnenfeld, M.D.
Janis F. Klavins, M.D.

ASSOCIATE IN CLINICAL PATHOLOGY
Christine Rohowsky-Kochan, Ph.D.

INSTRUCTOR
Elaine Reed, Ph.D.

INSTRUCTORS IN CLINICAL PATHOLOGY
James W. Allen, M.D.
Marguerite M. Duby, M.D.
Alberto F. Fernandez, M.D.
Ludmilla Olesnicky, M.D.
Robert E. Schmukler, E.Sc.D.
Monica C. Yang, M.D.
Elena Zegarelli-Schmidt, Ph.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professor

Harlan D. Alpern. *B.S., Michigan, 1967; M.D., Chicago, 1971*

INSTRUCTORS IN CLINICAL PATHOLOGY
Charles A. Ellsworth, M.D.
William B. Guiney, M.D.

At Harlem Hospital

Professor

Jack W. C. Hagstrom. *B.A., Amherst, 1955; M.D., Cornell, 1959*

Associate Clinical Professors

Prem Chauhan. *F.Sc., Med., Punjab (India), 1942; M.D., Cornell, 1959*
Carlos Navarro. *B.S., National University (Mexico), 1947; M.D., 1955*
Angus C. Sampath (in Microbiology). *D.Sc., Strasbourg, 1966*

Assistant Professor of Clinical Pathology

Edward Moskovic. *M.D., Central (Madrid), 1956*

Assistant Clinical Professors

Claude J. Neptune. *M.D., Haiti, 1963*
Helen M. S. Richards. *M.B., B.S., Colombo (Sri Lanka), 1969*
Louys Thomas. *M.D., Port-au-Prince (Haiti), 1965*

INSTRUCTOR IN CLINICAL PATHOLOGY
Ranjit K. Sachdev, M.B.B.S.

At Helen Hayes Hospital

Assistant Professor of Clinical Pathology

William David Dempster. *Ph.D., Glasgow, 1979*

At Morristown Memorial Hospital

Professor of Clinical Surgical Pathology

Marianne Wolff. *B.A., Hunter, 1948; M.D., Columbia, 1952*

Assistant Clinical Professor

Jerry Rothenberg. *B.S., Tulane, 1960; M.D., Medical College of Georgia, 1964*

INSTRUCTORS IN CLINICAL PATHOLOGY
Craig Dise, M.D.
Nancy Joy Hunter, M.D.
Jory G. Magidson, M.D.

At Overlook Hospital

Clinical Professor

Bernard M. Wagner. *M.D., Hahnemann, 1946*

Assistant Clinical Professors

Steven L. Goldberg. *B.A., Kenyon, 1963; M.D., State University of New York (Downstate), 1968*
Anthony Marchand. *B.A., Connecticut, 1966; M.D., Duke, 1970*
Joel A. Roth. *B.A., Brooklyn, 1964; M.D., State University of New York (Downstate), 1968*

ASSOCIATE IN CLINICAL PATHOLOGY
Frederick van Lente, M.D.

At St. Luke's–Roosevelt Hospital Center

Professor

Horton A. Johnson. *B.A., Colorado College (Colorado Springs), 1949; M.D., Columbia, 1953*

Professor of Clinical Surgical Pathology

Stephen F. Ryan. *B.S., Regis College (Denver), 1957; M.D., Colorado, 1961*

Associate Clinical Professors

John Y. Kiyasu. *B.A., California (Berkeley), 1951; Ph.D., 1955*
Louise Lang Phillips. *B.S., William and Mary, 1934; M.A., Columbia, 1940; Ph.D., 1950*

Assistant Professors of Clinical Pathology

Kenneth F. Button. *B.A., Indiana, 1966; M.D., 1970*
Deng Fong Liau. *M.Sc., McGill, 1968; Ph.D., 1971*

Assistant Clinical Professors

Harold P. Gaetz. *B.S., McGill, 1953; M.D., 1958*
Martin Krumerman. *B.S., New York University, 1961; M.D., 1965*
Bozidar Lazarevic. *M.D., Belgrade, 1956*
John V. Scholes. *B.S., Trinity (Connecticut), 1970; M.D., Columbia, 1974*
Corazon Sian. *A.A., Santo Tomas (Philippines), 1958; M.D., 1963*

LECTURER
David Spain, M.D.

INSTRUCTORS IN CLINICAL PATHOLOGY
Elizabeth Ames, M.D.
Pushpa Latha Kancherla, M.D.
Vijai Katatikorn, M.D.
Rose-Sunitha Thayaparan, M.D.

Pediatrics

Reuben S. Carpentier Professor and Chairman

Michael Katz (also Public Health). *B.A., Pennsylvania, 1949; M.D., State University of New York (Downstate), 1956; M.S., Columbia, 1963*

At Presbyterian Hospital

Professors

R. Peter Altman (Schullinger Professor of Pediatric Surgery) (also Surgery). *B.A., Colgate, 1955; M.S., Rochester, 1958; M.D., New York Medical College, 1961*
Arthur D. Bloom (also Human Genetics and Development). *B.A., Harvard, 1956; M.D., New York University, 1960*
Ralph Dell. *B.A., Pomona, 1957; M.D., Pennsylvania, 1961*
Darryl C. De Vivo (also Neurology). *B.A., Amherst, 1959; M.D., Virginia, 1964*

Anne A. Gershon. *B.A., Smith, 1960; M.D., Cornell, 1964*
Welton M. Gersony. *B.A., Syracuse, 1954; M.D., State University of New York (Upstate), 1958*
Allen I. Hyman (also Anesthesiology). *B.A., Columbia, 1955; M.D., Albany Medical College, 1959*
L. Stanley James (also Obstetrics and Gynecology). *M.D., Otago (New Zealand), 1948*
Robert B. Mellins. *B.A., Columbia, 1948; M.D., Johns Hopkins, 1952*
Sergio Piomelli. *B.A., Liceo Sannazzaro (Naples), 1948; M.D., Naples, 1954*
Myron Winick (Williams Professor). (Director, Institute of Human Nutrition). *B.A., Columbia, 1951; M.S., Illinois, 1952; M.D., State University of New York (Downstate), 1956*

Professors of Clinical Pediatrics

Abe Chutorian (also Neurology). *B.A., Manitoba, 1949; B.S., 1952; M.D., 1957*
Nicholas Cunningham (also Public Health). *B.A., Harvard, 1950; M.D., Johns Hopkins, 1955*
John M. Driscoll. *B.A., Hamilton, 1958; M.D., Bowman Gray, 1962*
Sylvia P. Griffiths. *B.A., Hunter, 1944; M.D., Yale, 1948*
Jerry C. Jacobs. *B.A., Columbia, 1952; M.D., 1956*
Anneliese L. Sitarz. *B.A., Bryn Mawr, 1950; M.D., Columbia, 1954*

Clinical Professors

Russell S. Asnes. *B.A., Boston, 1959; M.D., Tufts, 1963*
William J. Davis. *B.A., Wilkes, 1961; M.D., Columbia, 1965*
Joseph A. Silverman. *B.A., Princeton, 1952; M.D., Columbia, 1956*

Associate Professors

Richard Deckelbaum. *B.Sc., McGill, 1963; M.D., 1967*
Gabriel G. Haddad. *B.S., American (Beirut), 1969; M.D., 1972*
William C. Heird. *B.S., Maryville, 1958; M.S., Vanderbilt, 1963; Ph.D., Rutgers, 1971*
Ehud Krongrad. *M.D., Hebrew (Jerusalem), 1965*
Jeffrey Michael Lipton. *B.A., Queens, 1967; Ph.D., Syracuse, 1972; M.D., St. Louis, 1975*
Gilbert W. Mellin. *B.S., Bethany, 1945; M.D., Johns Hopkins, 1949*
Akira Morishima. *M.D., Keio (Japan), 1954; Ph.D., 1961*
Nigel Paneth (also Public Health) (in the Sergievsky Center). *B.A., Columbia, 1968; M.D., Harvard, 1972; M.P.H., Columbia, 1978*
S. Alex Stalcup. *B.A., Whittier, 1967; M.D., California, 1971*
Raymond I. Stark. *B.S., Columbia, 1963; M.D., 1970*

Associate Professor of Pharmacology

Joseph Graziano. *B.S., Long Island, 1967; Ph.D., Rutgers, 1971*

Associate Professors of Clinical Pediatrics

Stephen J. Atwood. *B.A., Dartmouth, 1968; M.D., Albert Einstein, 1972*
Jennifer J. Bell. *B.A., Swarthmore, 1953; M.D., New York University, 1961*
Charles H. Feldman. *B.A., Columbia, 1966; M.D., State University of New York (Downstate), 1970*
Harold E. Fox (also Obstetrics and Gynecology). *M.Sc., Rochester and Oxford, 1972*
Allan Hordof. *B.A., Hobart, 1962; M.D., New York University, 1966*
Adrien Moessinger. *M.D., Lausanne, 1971*
Martin Nash. *B.A., Duke, 1960; M.D., 1964*
Jane Pitt. *B.A., Radcliffe, 1960; M.D., 1964*
Tove S. Rosen. *B.A., Rochester, 1961; M.D., State University of New York (Downstate), 1965*
Karl F. Schulze. *B.A., Carleton, 1961; M.D., Rochester, 1965*
Dorothy Warburton (in Genetics and Development). *Ph.D., McGill, 1961*

Associate Clinical Professors

Fred Agre. *B.A., Lafayette, 1957; M.D., Duke, 1961*
Robert Appleby. *M.D., Johns Hopkins, 1949*
William A. Bauman. *B.S., Harvard, 1943; M.D., Columbia, 1946*
Frederick Bomback. *B.A., Brandeis, 1965; M.D., New York University, 1969*
Constance J. Hayes. *B.S., St. Rose, 1959; M.D., Loyola, 1965*
Mathilde Irigoyen. *B.A., Buenos Aires, 1966; M.D., 1971*
John J. Kangos. *B.S., Rutgers, 1945; M.D., Long Island College of Medicine, 1948*
Kenneth H. Katz. *B.A., Lafayette, 1968; M.D., New York Medical College, 1973*
George Lazarus. *B.A., Yale, 1967; M.D., Columbia, 1971*
Harriet E. McGurk. *B.A., Radcliffe, 1967; M.D., Albert Einstein, 1965*
Michael Novogroder. *B.S., Brooklyn, 1965; M.D., State University of New York, 1969*
Jack Shiller. *B.A., North Carolina, 1947; M.D., Columbia, 1952*

Research Scientist

Rajeskhar Ramakrishnan. *B.Tech., India Institute of Technology, 1968; M.S., Columbia, 1971; D.Eng.Sc., 1974*

Assistant Professors

Linda Addonizio. *B.S., Stanford, 1974; M.D., Columbia, 1978*
Kwame Anyane-Yeboa. *M.D., Ghana, 1972*
Alia Bazzy-Asaad. *B.S., American (Beirut), 1973; M.D., 1978*
Fredrick Bierman. *B.S., Union College, 1969; M.D., State University of New York (Downstate), 1973*
Dennis Davidson (also in Public Health) (in the Sergievsky Center). *B.S., St. Lawrence, 1970; M.D., Loyola Stritch School of Medicine, 1974*
Leslie Davidson. *B.A., Radcliffe, 1970; M.D., Columbia, 1978*
Candace Jean Erickson. *B.A., George Washington, 1969; M.D., Maryland, 1973*
James Garvin. *B.A., Harvard, 1968; M.D., Jefferson, 1976*
Ludovico Guarini. *M.D., Naples, 1974*
Sudha Kashyap. *M.B.B.S., St. John's (Bangalore, India), 1972*
Norma B. Lerner. *M.D., Brown, 1975*
Joseph S. Levy. *M.D., Hadassah (Israel), 1971*
Peter M. Luckett. *B.A., Kentucky, 1972; M.D., 1978*
Andrea M. Marks, *B.A., Bryn Mawr, 1968; M.D., Pennsylvania, 1972*
Joan A. Regan. *B.A., College of Mount St. Vincent (New York), 1969; M.D., Missouri, 1974*
Ulana Sanocka. *B.S., Brooklyn, 1968; M.D., New York University, 1974*
Robert L. Seigle. *B.A., Northwestern, 1970; Columbia, 1974*
Thomas Joseph Starc. *B.A., California (Berkeley), 1972; M.D., Mt. Sinai, 1976*

Assistant Professors of Clinical Pediatrics

Gaya S. Aranoff. *B.A., Barnard, 1972; M.D., Albert Einstein, 1975*
Christine Marie Donnelly. *B.A., Manhattanville, 1973; M.D., Columbia, 1978*
Bernard R. Feldman. *B.S., William and Mary, 1955; M.D., Chicago Medical School, 1959*
Burton Grebin. *B.A., Adelphi, 1962; M.D., New York Medical College, 1966*
Samistha Bhaduri Hauger. *B.S., Texas, 1972; M.D., Loyola Stritch, 1976*
Donald E. Hutchings (also Psychiatry). *B.A., Lake Forest, 1959; M.A., Chicago, 1963*
Celia Ores. *M.D., Berne (Switzerland), 1956*
Nan Salamon. *B.S., Cornell, 1975; M.D., Pittsburgh, 1981*

Assistant Clinical Professors

Rose G. Ames. *B.A., Barnard, 1939; M.D., Columbia, 1944*
Michael Bartalos. *M.D., Heidelberg, 1960*

Alexander Blum, Jr. *B.S., Yale, 1944; M.D., Harvard, 1947*
Matilda B. Brust. *B.A., Marietta, 1952; M.D., New York University, 1956*
Roger Challop. *B.S., Brooklyn, 1963; M.D., New York Medical College, 1967*
Yvonne T. Driscoll. *B.A., Trinity, 1958; M.D., Women's Medical College of Pennsylvania, 1962*
T. Donald Eisenstein. *B.A., Johns Hopkins, 1952; M.D., Albany Medical College, 1956*
Jane Eliot Fried (in Psychiatry). *B.A., Vassar, 1964; M.D., Columbia, 1970*
Marguerite J. Gates. *B.A., Barnard, 1950; M.D., Columbia, 1954*
Gustave Gavis. *B.A., Indiana, 1948; M.D., State University of New York (Downstate), 1952*
Stephen Glaser. *B.A., Columbia, 1960; M.D., New York University, 1964*
Bertram H. Grossman. *B.A., North Carolina, 1948; M.D., Georgetown, 1959*
Philip Kazlow. *B.A., Yeshiva, 1976; M.D., Mt. Sinai, 1980*
Murray D. Kuhr. *B.S., Cincinnati, 1961; M.D., Chicago, 1965*
Betty C. M. L. Kuo. *B.A., Vassar, 1959; M.D., Albany Medical College, 1964*
Daniel J. Melia. *B.A., Harvard, 1941; M.D., Columbia, 1949*
Mona Milstein. *B.A., State University of New York (Binghamton), 1965; M.D., State University of New York (Buffalo), 1969*
Harriette R. Mogul. *B.A., Bryn Mawr, 1961; M.D., Albert Einstein, 1965*
Damyanti Moorjani (also Rehabilitation Medicine). *B.S., Bombay, 1953; M.D., Grant (Bombay), 1957*
Stanley Morrison. *B.A., Temple, 1963; M.D., George Washington, 1967*
Herbert Poch. *B.A., Columbia, 1949; M.D., 1953*
Morton H. Rachelson. *B.A., Syracuse, 1946; M.D., Tulane, 1950*
Margaret M. Rice. *B.S., Marymount, 1943; M.D., New York Medical College, 1947*
Roderick C. Richards. *B.A., Cornell, 1945; M.D., 1948*
Louis Rodrigues. *B.S., College of the City of New York, 1955; M.D., State University of New York (Downstate), 1959*
John S. Rosmaita. *B.A., St. Peter's, 1953; M.D., State University of New York, 1957*
Malcolm S. Schwartz. *D.O., College of Osteopathic Medicine and Surgery, 1967*
Edith M. L. Kuo-Ying Shen. *M.D., Ludwig-Maximilian (Munich), 1960*
Kung-Tso Sheng. *M.D., St. John's (Shanghai), 1954*
David Siegler. *B.S., Columbia, 1975; M.D., Tufts, 1979*
William H. Smith. *B.A., Rochester, 1941; M.D., 1944*
Susan Spear. *B.A., Wellesley, 1968; M.D., Columbia, 1972*
Margaret Ann Stillman. *B.A., Yale, 1973; M.D., Columbia, 1977*
Martin B. Vita. *B.S., Yale, 1950; M.D., 1954*
David Wisotsky. *B.S., College of the City of New York, 1970; M.D., Albert Einstein, 1974*

Associate Research Scientists

Elizabeth Anisfeld. *B.A., Toronto, 1960; M.A., McGill, 1961; Ph.D., 1964*
David F. Donnelly. *B.S., Rensellaer, 1974; M.E., 1975; Ph.D., Albany Medical College, 1979*
David Evans. *B.A., Harvard, 1964; M.A., Northwestern, 1969; Ph.D., 1975*
Shiv Kapoor. *B.S., Delhi, 1968; M.S., Agra, 1970; M.S., All-India Institute of Medical Science, 1976*
Moshe J. L. Levison. *B.A., Pennsylvania, 1965; Ph.D., Indiana, 1973*
Carol Seaman. *B.S., Southern California, 1964; M.S., New York University, 1977*
Malathy Singh. *B.S., Madras, 1961; M.S., Baroda, 1965; Ph.D., Delhi, 1970*
Sharon P. Steinberg.
Yvonne Wasilevski. *B.A., Seton Hall, 1970; M.A., New School for Social Research, 1973; M.Phil., Columbia, 1981; Ph.D., 1984*
Joyce Weil. *B.S., Queens, 1964; Ph.D., City University of New York, 1970*

LECTURERS
Albert Aharon, M.D.
Armond V. Mascia, M.D.
Yaakov Schechter, Ph.D.

ASSOCIATES IN CLINICAL PEDIATRICS
Lilian Wah-Ying Chiu, M.D.
Elaine Choy Lee, M.D.

ASSOCIATES *(continued)*
Maryann J. Colenda, M.D.
John L. Costa, M.D.
Robert A. Hands, M.D.
Alan Kanter, M.D.
Judith Luskin, M.D.
Peter F. Migel, M.D.
Robert M. Schwartz, M.D.

INSTRUCTORS IN CLINICAL PEDIATRICS
Martha L. Amarant, M.D.
Stephen M. Arpadi, M.D.
Dennis Brown, M.D.
Jocelyn Brown, M.D.
Kuang-Chung Hu Chien, M.B.
Larry Paul Dana, M.D.
Ann L. Englelland, M.D.
Bernard Etra, M.D.
Arlene Falk, M.D.
Patrick Hicks-Hartman, M.D.
Stuart Kaufman, M.D.
Martha Ellen Katz, M.D.
Yukiko Kimua, M.D.

INSTRUCTORS *(continued)*
Janice Fern Kelin, M.D.
Robert M. Klen, M.D.
Rosemary Klenk, M.D.
Michael L. Lapkin, M.D.
Dorothy Levine, M.D.
Terry Marx, M.D.
Neil Minikes, M.D.
Sylvia Morgan, M.A.
Elizabeth Jane Nichols,
Carlyn Ann Oppedisano, M.D.
Kenneth Pituch, M.D.
Andrew David Racine, M.D.
Jill Ratner, M.D.
Morton J. Seligman, M.D.
Susan Skalsky, M.D.
D. Loren Southern, M.D.
Lynn M. Sugarman, M.D.
Millicent Sutton, M.D.
Gail Schewitz, M.D.
Nicki Lyn Timko, M.D.
Mary Versfelt, M.D.
Tova Yellin, M.D.
Eric R. Yorke, M.D.

At Mary Imogene Bassett Hospital

Associate Clinical Professor

Allan S. Cunningham. *B.A., Yale, 1962; M.D., Western Reserve, 1966*

ASSOCIATES IN CLINICAL PEDIATRICS
George V. D'Avignon, M.D.
John G. Freehafer, M.D.

At Harlem Hospital

Associate Professor

Margaret Heagerty. *B.A., Seton Hall, 1957; B.S., West Virginia, 1959; M.D., Pennsylvania, 1961*

Associate Professors of Clinical Pediatrics

Wiener Leblanc. *B.S., Haiti, 1950; M.D., 1956*
Gene-Ann Polk. *B.A., Oberlin, 1948; M.D., Woman's Medical College of Pennsylvania, 1952; M.P.H., Columbia, 1958*

Assistant Professor

Ilene Fennoy. *B.A., Stanford, 1968; M.D., California (San Francisco), 1973*

Assistant Professors of Clinical Pediatrics

Araceli R. Ancajas. *M.D., Santo Tomas (Philippines), 1961*
Josephine Kerr. *B.A., Cornell, 1947; M.D., New York University, 1951*
Yusuf M. Khakoo. *M.B.B.S., Bombay, 1962*

Assistant Clinical Professors

David Bateman. *B.A., College of Wooster, 1968; M.D., Tufts, 1973*
Serge Fenelon. *M.D., Lausanne, 1973*
Vincent E. Hutchinson. *M.B.,B.S., West Indies, 1972*
Seema Kundu. *M.B.B.S., Maulana Azad Medical College (India), 1976; M.D., New Delhi, 1979*
Sheila Lynn Palevsky. *B.A., Hofstra, 1973; M.D., Pittsburgh, 1978*
Muriel M. Petioni. *B.S., Howard, 1934; M.D., 1937*
Margarita A. Silvera. *B.S., Brooklyn, 1969; M.D., Albert Einstein, 1973*
Claudina Y. Wallace. *B.S., Howard, 1963; M.D., 1967*

INSTRUCTORS IN CLINICAL PEDIATRICS
Beverly Anderson, M.D.
Delores J. Gayle-Thompson, M.D.
Patricia A. Battle Thibou, M.D.

At Morristown Memorial Hospital

Associate Clinical Professors

Lawrence M. Skolnick. *B.A., Queens, 1968; M.D., New York University, 1972; M.P.H., North Carolina, 1980*
Stephen Wang. *B.A., Columbia, 1960; M.D., 1964*
Philip R. Ziring. *B.A., New York University, 1958; M.D., 1962*

Assistant Clinical Professors

Pauline Brenholz. *M.D., Albert Einstein, 1973*
William Chernack. *B.A., Cornell, 1966; M.D., New York Medical College, 1970*
Martin Lewis Cohen. *M.D., State University of New York (Upstate), 1967*
Ella Cummins. *B.A., Smith, 1935; M.D., Albany, 1939*
Henry J. Kim. *M.D., Seoul National, 1962*
David E. Knoop. *B.A., Harvard, 1958; M.D., Yale, 1962*
Robert Kornblum. *B.A., Columbia, 1958; M.D., State University of New York (Downstate), 1962*
William Lupatkin. *B.S., Columbia, 1965; M.S., 1966; Ph.D., 1970; M.D., Miami (Florida), 1974*
Gaines M. Mimms. *B.A., Duke, 1971; M.D., Bruxelles (Belgium), 1979*
Andrew Schenkman. *M.D., Chile, 1976*
Harold Starkman. *B.A., New York University, 1973; M.D., Albert Einstein, 1976*

INSTRUCTORS IN CLINICAL PEDIATRICS
Fern Gotfried, M.D.
Mary Ann Lo Frumento, M.D.
Theodore A. Kastner, M.D.

At Overlook Hospital

Clinical Professor

Gloria Schrager. *B.A., Brooklyn, 1944; M.D., Woman's Medical College of Pennsylvania, 1948*

Associate Clinical Professors

Solomon J. Cohen. *B.A., Cornell, 1944; M.D., Johns Hopkins, 1951*
Stephen M. Golden. *M.D., New York University, 1970*

Assistant Clinical Professors

Joseph I. Boylan. *B.A., Columbia, 1951; M.D., Yale, 1955*
Frederick C. Braun, Jr. *B.S., Georgetown, 1951; M.D., Jefferson, 1955*
Howard S. Britt. *B.A., M.D., Boston, 1970*
Burton M. Feinsmith. *B.S., Arkansas, 1949; M.S., Florida, 1951; M.D., Berne, 1961*
Stephen Halpern. *B.A., Rochester, 1972; M.D., Chicago Medical School, 1976*
Benjamin H. Josephson. *B.S., North Carolina, 1949; M.D., New York Medical College, 1952*
Joseph Kalbacher. *B.S., Yale, 1944; M.D., Cornell, 1946*
John H. Krikorian. *B.A., Yale, 1958; M.D., Bowman Gray, 1963*
Carolkay Lissenden. *B.A., Pennsylvania, 1959; M.D., Woman's Medical College of Pennsylvania, 1964*
Lewis I. Sank. *B.A., Johns Hopkins, 1957; M.D., 1961*
Steven A. Schlachter. *B.S., St. Peter's College (New Jersey), 1967; M.D., George Washington, 1971*
Frederic A. Schulaner. *B.S., Tufts, 1955; M.D., 1959*
Margaret E. Symonds. *M.B., London, 1941; B.S., 1945*
Sandy P. Waran. *M.D., Ceylon, 1968*

ASSOCIATES IN CLINICAL PEDIATRICS

Paul Avondoglio, M.D.
Wesley Boodish, M.D.
Martin Diamond, M.D.
Paul A. Kearney, M.D.
Barry Lauton, M.D.
John F. Vigorita, M.D.
Donald Wight, M.D.

INSTRUCTORS IN CLINICAL PEDIATRICS

Harvey M. Binder
Ghitta Eibschutz, M.D.
Frank P. Frenda, M.D.
Carl H. Herman, M.D.

INSTRUCTORS *(continued)*

Ilene Hershman, M.D.
Alexander R. Horowitz, M.D.
Anita Joseph, M.B.B.S.
Victor S. Lamberto, M.D.
Donna Mahlstedt
Uday C. Mehta, D.C.H.
Alice Merkrebs, M.D.
Bharati S. Mullick, M.D.
John Owen Percy, M.D.
Vinnakota V. P. Rao, M.D.
Dudley A. Roberts, M.D.
Stanislawa Rosnowski, M.D.
Arvind P. Shah, M.D.
James Sorger, M.D.

At St. Luke's–Roosevelt Hospital Center

Professors of Pediatrics

Louis Z. Cooper. *B.S., Yale, 1954; M.D., 1957*
Lenore S. Levine. *B.A., Vassar, 1954; M.D., New York Medical College, 1958*

Associate Professor of Pediatric Virology

Elena B. Klein. *M.D., State Institute of Medicine and Pharmacy (Rumania), 1953; Ph.D., Institute of Microbiology (Rumania), 1972*

Associate Professor of Clinical Pediatrics

Doris L. Wethers. *B.S., Queens, 1948; M.D., Yale, 1952*

Assistant Professor

Sharon Oberfield. *B.A., Cornell, 1970; M.D., 1974*

Assistant Professor of Clinical Child Development

Madeline W. Appell. *B.A., Queens, 1962; M.A., 1963*

Assistant Professor of Clinical Pediatrics

Florence Ann Nolan. *M.D., Albany, 1977*

Assistant Professor of Clinical Pediatric Psychology

Jeanne Brooks-Gunn. *B.A., Connecticut College, 1969; Ed.M., Harvard, 1970; Ph.D., Pennsylvania, 1975*

Assistant Professor of Clinical Psychology

Harvey Haynex Mar. *B.S., Washington (Seattle), 1972; M.A., Columbia, 1973; Ph.D., 1977*

Assistant Clinical Professors

Dennis Allendorf. *B.S., Georgetown, 1965; M.D., New York Medical College, 1970*
Garth Alperstein. *M.B.Ch.B., Cape Town, 1973*
Anastasios Anastasiades. *M.D., Athens, 1950*
Saroj Sahgal Bakshi. *M.B., B.S., Government Medical College (Amritsar, India), 1960; M.D., Institute of Postgraduate Medical Education and Research (Chadigarh, India), 1969*
Carmelita V. Britton. *B.S., Rensellaer, 1973; M.D., Albany Medical College, 1973*
Chaya Chakrabarti. *B.Sc., Calcutta, 1963; M.D., 1969*
Herbert I. Cohen. *M.D., Johns Hopkins, 1949*
Ragabardial R. Dwarka. *B.S., Hebrew (Jerusalem), 1965; M.D., 1969*
Joan M. Flanigan. *B.A., Case Western Reserve, 1962; M.D., 1966*
Diane Hochlerin. *B.S., Brooklyn, 1962; M.D., Women's Medical College of Pennsylvania, 1966*
Fadel M. Hochroth. *B.A., Louisville, 1953; M.D., 1957*
Harry Kimmel. *B.A., St. Andrews (Bucharest), 1940; M.D., Bucharest, 1949*
Katherine Lodyjensky. *M.D., Montreal, 1943*
Neil Lombardi (also Neurology). *B.A., M.D., Boston, 1967*
Monica Ruth Meyer. *B.A., Radcliffe, 1967; M.D., Case Western Reserve, 1973*
Richard Mones. *B.A., Brooklyn, 1967; M.D., New York Medical College, 1971*
James W. Nettleton. *B.S., McPherson, 1962; M.D., Minnesota, 1972*
Farrokh Sharivar. *M.D., Tehran, 1966*
Shantha Subramaniam. *M.B.,B.S., Madras (India), 1962*
Lucy M. Swift. *B.A., Barnard, 1948; M.D., Columbia, 1953*
Max F. Van Gilder. *B.S., Tulane, 1967; M.D., 1971*
Ranjeet Virdi. *B.S., India, 1960; M.D., 1970*
Elizabeth Watkins. *B.A., Randolph-Macon Women's College, 1947; M.D., Columbia, 1951*

Associate Research Scientists

Mathilde Krim. *B.S., Geneva, 1948; Ph.D., 1953*
Joseph A. Sonnabend. *M.B.B.Ch., Witwatersrand, 1956*

ASSOCIATES IN CLINICAL PEDIATRICS

Ricarda L. Baum, M.D.
Renata Frenkel, M.D.
Rodney L. Hite, M.D.
Nancy Holahan, M.D.
Thomas H. Hyatt, Jr., M.D.
Ruth E. Kessler, M.D.
Kusum Khanna, M.B.B.S.
Priscilla W. Lewis, M.D.
Richard Gary Merkler, M.D.
Edward A. Nichols, M.D.
Flora Ramirez, M.D.
Natalie Sarkanich, M.D.
Brenda Harris Tynes, M.D.
Thelma Verano-Santiago, M.D.

INSTRUCTORS IN CLINICAL PEDIATRICS

Carlos Emilio Arzeno, M.D.
Alwyn T. Cohall, M.D.
Luminita M. David, M.D.
Morel Duverseau, M.D.
Arthur J. Kovel, M.D.
Roberta E. Leon, M.D.
Pleno J. Moise, M.D.
Ernest Nii-Amu Quaye
Amelia Reyes, M.D.
Milagros Santiago
Melissa M. Sedlis, M.D.
Barbara E. Strassberg, M.D.
Michael Glen Teitel, M.D.
Steven Tsoutsousras, M.D.

Pharmacology

David Hosack Professor and Chairman

Brian F. Hoffman. *A.A., Princeton, 1943; M.D., Long Island College of Medicine, 1947*

Professors

J. Thomas Bigger, Jr. (also Medicine). *B.A., Emory, 1955; M.D., Georgia, 1960*
John Bilezikian (also Medicine). *B.A., Harvard, 1965; M.D., Columbia, 1969*
Norman Kahn (also Dental and Oral Surgery). *B.A., Columbia, 1954; D.D.S, 1958; Ph.D., 1964*
Harold C. Neu (also Medicine). *B.A., Creighton, 1956; M.D., Johns Hopkins, 1960*
Shi-Hsun Ngai (also Anesthesiology). *M.D., National Central (Nanking), 1944*
Michael R. Rosen (also Pediatrics). *B.A., Wesleyan, 1960; M.D., State University of New York (Downstate), 1964*
Wilbur H. Sawyer (Gustavus and Louis Pfeiffer Professor). *B.A., Harvard, 1942; M.D., 1945; Ph.D., 1950*
Hsueh-Hwa Wang. *M.D., National Central (Nanking), 1946*
Andrew L. Wit. *B.S., Bates, 1963; Ph.D., Columbia, 1968*

Adjunct Professors

Allan H. Conney (in Anesthesiology). *B.S., Wisconsin, 1952; M.S., 1954; Ph.D., 1956*
Paul F. Cranefield. *Ph.B., Wisconsin, 1946; Ph.D., 1951; M.D., Albert Einstein, 1964*
Peter K. T. Pang. *B.Sc., Hong Kong, 1964; M.S., Yale, 1968; Ph.D., 1970*
Jurg Schneider. *M.D., Basel (Switzerland), 1945*
Sidney Spector (also Anesthesiology). *B.S., Denver, 1948; M.S., 1950; Ph.D., Jefferson, 1956*
Robert M. Weiss. *B.S., Franklin and Marshall, 1957; M.D., State University of New York (Downstate), 1960*

Associate Professors

Joseph Graziano (in Pediatrics). *B.S., Long Island, 1967; Ph.D., Rutgers, 1971*
Richard B. Robinson. *Ph.D., Illinois, 1975*

Adjunct Associate Professors

Arthur Joel Blume. *B.A., Rochester, 1963; M.S., Syracuse, 1966; Ph.D., 1968*
Marvin R. Blumenthal. *B.S., Michigan, 1946; M.D., Columbia, 1949*
Ira Cohen. *B.A., Columbia, 1969; M.D., Ph.D., New York University, 1974*

Research Scientists

Peter Danilo, Jr. *Ph.D., Columbia, 1974*
Daniel J. Goldberg. *Ph.D., Yale, 1974*

Assistant Professors

Penelope Altman Boyden. *B.A., Wells, 1970; M.A., M.Phil., Columbia, 1976; Ph.D., 1979*
Kenneth Dangman. *B.S., Bucknell, 1971; M.A., M.Phil., Columbia, 1974; Ph.D., 1977*
Stephen Jay Feinmark (in Medicine). *B.A., Johns Hopkins, 1974; M.Sc., George Washington, 1977; Ph.D., 1980*
Daniel J. Goldberg (also Neurology). *Ph.D., Yale, 1974*
Richard Paul Kline. *B.A., Harvard, 1968; M.S., Pennsylvania, 1970; Ph.D., 1975*
Richard B. Robinson. *Ph.D., Illinois, 1975*
Steven A. Siegelbaum (in the Center for Neurobiology and Behavior). *Ph.D., Yale, 1978*

Adjunct Assistant Professors

Kwun-Ping Fu. *B.S., National Taiwan, 1966; M.S., Kansas State, 1970; Ph.D., Rutgers, 1974*
Jaya Haldar. *M.Sc., Calcutta, 1961; Ph.D., London, 1966*
Edward B. Kirsten. *B.S., Fairleigh Dickinson, 1962; M.S., New York University, 1966; Ph.D., City College, 1969*
Robert S. Sloviter (also Neurology). *B.S., Drexel, 1973; Ph.D., Pennsylvania State, 1978*

Associate Research Scientists

Francesco Belardetti. *B.S., Liceo Classica A. Manzoni (Italy), 1970; M.D., Milan, 1976*
Stephen M. Dillon. *B.S.E., Pennsylvania, 1976; M.S.E., Ph.D., 1984*
Karl P. Dresdner. *B.A., Lake Forest, 1971; M.S. Cornell, 1981; Ph.D., Mt. Sinai, 1983*
Lisa Ebihara. *B.S., Northwestern, 1975; Ph.D., Duke, 1980; M.D., 1981*
Gea-Ny Tseng. *B.S., National Taiwan, 1977; M.S., 1979; M.Ph., 1981; Ph.D., 1985*

Adjunct Associate Research Scientist

Jeffrey L. Hill. *B.A., Center College of Kentucky, 1972; Ph.D., Kentucky, 1978*

Physiology and Cellular Biophysics

John C. Dalton Professor and Chairman

Samuel C. Silverstein. *B.A., Dartmouth, 1958; M.D., Albert Einstein, 1963*

Professors

Qais Al-Awqati (also Medicine). *M.B., Ch.B., Baghdad, 1962*
Shu Chien. *M.B., National Taiwan, 1954; Ph.D., Columbia, 1957*
Jorge Fischbarg (in Ophthalmology). *M.D., Buenos Aires, 1962; Ph.D., Chicago, 1971*
Eric R. Kandel (also Psychiatry). *B.A., Harvard, 1952; M.D., New York University, 1956*
William L. Nastuk. *B.S., Rutgers, 1939; Ph.D., 1945*
Mero Nocenti. *B.A., West Virginia, 1951; M.S., 1952; Ph.D., Rutgers, 1955*
David Schachter. *B.S., New York University, 1946; M.D., 1949*
James H. Schwartz (also Neurology). *B.S., Columbia, 1954; M.D., New York University, 1959; Ph.D., Rockefeller, 1964*

Associate Professors

Martin Blank. *B.S., College of the City of New York, 1954; Ph.D., Columbia, 1957; Ph.D., Cambridge, 1959*
Raimond Emmers. *B.A., East Texas Baptist, 1953; M.A., North Carolina, 1955; Ph.D., Syracuse, 1958*
Michel Ferin (in Obstetrics and Gynecology). *M.D., Louvain, 1964*
Kung-Ming Jan (also Medicine). *M.B., National Taiwan, 1967; Ph.D., Columbia, 1971*
Herbert Lipowsky. *M.S., Polytechnic Institute of Brooklyn, 1968; Ph.D., California (San Diego), 1975*

Senior Research Scientist

Shunichi Usami. *M.B., Sheffield, 1972; Ph.D., London, 1979*

Assistant Professor

Jane Dodd. *Ph.D., Cambridge, 1979*

Associate Research Scientists

Richard E. Abbott. *B.A., Tufts, 1967; Ph.D., Columbia, 1972*
Anne Marie Chabanel. *M.A., Paris, 1972; Ph.D., Strassbourg, 1978*
Martha B. Furie. *B.S., Cornell, 1974; Ph.D., Rockefeller, 1980*
Steven D. House. *B.S., Calvin (Michigan); Ph.D., Arizona, 1983*
Mary E. Kirch. *B.S., Syracuse, 1972; Ph.D., Boston, 1978*
Mary M. L. Lee. *B.A., Hunter, 1965; M.S., Michigan, 1966; Ph.D., Columbia, 1972*
John D. Loicke. *B.A., Yeshiva, 1971; Ph.D., Albert Einstein, 1976*
Emily Ann Schmalzer. *B.A., Radcliffe, 1966; M.D., New York University, 1970*
Shlomoh Simchon. *M.Sc., Hebrew (Jerusalem), 1971; Ph.D., Columbia, 1980*
Lily Soo. *M.S., Baylor, 1964; Ph.D., Texas Woman's, 1973*
Kuo-Li Paul Sung. *B.S., National Taiwan, 1969; M.A., William and Mary, 1975; M.A., Columbia, 1977; Ph.D., Rutgers, 1982*
Lanping Amy Sung. *B.S., National Taiwan, 1971; M.A., William and Mary, 1974; M.Ph., Columbia, 1981; Ph.D., 1982*

Adjunct Associate Research Scientists

Ronald D. Carlin. *B.S., Fairleigh Dickinson, 1967; M.S., 1969; M.Phil., Columbia, 1973; Ph.D., 1975*
Dean A. Handley. *B.S., Lycoming, 1971; M.S., Rutgers, 1976; Ph.D., 1978*

At St. Luke's–Roosevelt Hospital Center

Assistant Professor

Jahar Battacharya (in Medicine). *M.B.B.S., All-India Institute Medical School; M.Sc., Oxford, 1973; D.Phil., 1976*

Psychiatry

Lawrence Kolb Professor and Chairman

Herbert Pardes. *B.S., Rutgers, 1956; M.D., State University of New York (Downstate), 1960*

At New York State Psychiatric Institute

Professors

Myron Hofer. *B.A., Harvard, 1954; M.D., 1958*
Eric R. Kandel (University Professor) (also Physiology) (in the Hughes Institute). *B.A., Harvard, 1952; M.D., New York University, 1956*
Donald F. Klein. *B.A., Colby, 1947; M.D., State University of New York (Downstate), 1952*
Irving Kupferman (also Physiology) (in the Center for Neurobiology and Behavior). *Ph.D., Chicago, 1964*
David Shaffer. *M.B.B.S., London, 1961; Academic Diploma Psychological Medicine, 1969*
Robert L. Spitzer. *B.A., Cornell, 1953; M.D., New York University, 1957*
Robert J. Weiss (also Medicine) (also Public Health). *B.A., George Washington, 1947; M.D., Columbia, 1951*

Professor of Dentistry

Austin H. Kutscher. *B.A., New York University, 1945; D.D.S., Columbia, 1946*

Professor of Public Health

Denise Kandel (Sociomedical Sciences). *Ph.D., Columbia, 1960*

Professor of Social Sciences

Bruce Dohrenwend (also Public Health) (Epidemiology). *B.A., Columbia, 1950; Ph.D., Cornell, 1955*

Professor of Clinical Neurochemistry

Hadassah Tamir. *M.S., Hebrew (Jerusalem) 1955; Ph.D., Israel Institute of Technology, 1959*

Professors of Clinical Psychiatry

H. Donald Dunton (in Pediatrics). *M.D., Rochester, 1945*
L. Erlenmeyer-Kimling (in Genetics and Development). *B.S., Columbia, 1957; Ph.D., 1960*
Ronald R. Fieve. *B.A., Wisconsin, 1952; M.D., Harvard, 1955*
Archie R. Foley. *B.A., Queens (Canada), 1943; M.D., C.M., 1947; M.S., Columbia, 1962*
Alexander H. Glassman. *B.A., Illinois, 1956; M.D., 1958*
Barry J. Gurland (Borne Professor). *M.B., Ch.B., Capetown, 1955*
Joseph Jaffe. *B.A., Columbia, 1944; M.D., New York University, 1947*
Donald S. Kornfeld. *B.S., Franklin and Marshall, 1950; M.D., Yale, 1954*
Roger MacKinnon. *M.D., Columbia, 1950*
Sidney Malitz. *B.S., Tulane, 1943; M.D., Chicago Medical School, 1946*
Ethel Person. *B.A., Chicago, 1956; M.D., New York University, 1960*
Frederic M. Quitkin. *B.A., Princeton, 1958; M.D., State University of New York (Downstate), 1962*
John D. Rainer (in Human Genetics and Development). *M.D., Columbia, 1951*
James H. Ryan. *B.A., Yale, 1952; M.D., Harvard, 1956*

Professors of Clinical Psychology

Jean Endicott. *B.A., Connecticut (Storrs), 1958; M.A., Columbia, 1959; Ph.D., 1965*
Anke Ehrhardt. *Ph.D., Dusseldorf, 1969*
Rachel Gittelman. *B.A., College of the City of New York, 1957; Ph.D., Columbia, 1966*

Professor of Clinical Social Sciences

Emily Mumford. *M.A., Columbia, 1959; Ph.D., 1963*

Clinical Professors

Paul A. Bradlow. *B.A., Pennsylvania, 1941; M.A., 1942; M.D., Hahnemann, 1946*
Richard Druss. *B.A., Yale, 1955; M.D., Columbia, 1959*
Richard A. Gardner. *B.A., Columbia, 1952; M.D., State University of New York, 1956*
Willard Gaylin. *B.A., Harvard, 1947; M.D., Case Western Reserve, 1951*
Clarice J. Kestenbaum. *B.A., California (Los Angeles), 1950; M.D., 1960*
Benjamin Kissin. *B.S., Columbia, 1938; M.D., Long Island College of Medicine, 1941*
Alexander M. Levay. *B.A., Wesleyan, 1953; M.D., Rochester, 1957*
Robert S. Liebert. *B.S., Syracuse, 1951; M.A., Clark, 1956; M.D., New York University, 1960*
Donald Myers. *B.S., Franklin and Marshall, 1946; M.D., Jefferson, 1950*
Helen Myers. *B.A., Hunter, 1945; M.D., New York University, 1949*
Ralph N. Wharton. *B.A., M.D., Columbia, 1957*

Associate Professor of Medical Psychology

Jacques Rutschmann. *D.Sc., Geneva, 1956*

Associate Professor of Clinical Biochemical Psychiatry

George Alexander. *B.S., Hobart, 1949; Ph.D., Rutgers, 1953*

Associate Professors of Clinical Neurobiology and Behavior

Vincent F. Castellucci. *B.A., Laval, 1960; B.Sc., 1964; Ph.D., Washington (St. Louis), 1968*
John D. Koester. *B.A., Wooster, 1965; Ph.D., Columbia, 1971*

Associate Professors of Clinical Psychiatry

Amiram Barkai. *M.Sc., Hebrew (Jerusalem), 1963; Ph.D., 1970*
Miron Baron. *M.D., Tel Aviv, 1972*
Ruth Bennett (Sociology) (in Public Health). *Ph.D., Columbia, 1962*
Jerry Finkel (also Medicine). *B.A., Columbia, 1957; M.D., 1961*
David V. Forrest. *B.A., Princeton, 1960; M.D., Columbia, 1964*
Jack Matthew Gorman. *B.A., Pennsylvania, 1973; M.D., Columbia, 1973; M.D.*
Lawrence L. Greenhill. *B.A., Columbia, 1963; M.D., Albert Einstein, 1967*
Michael Liebowitz. *B.A., Yale, 1965; M.D., 1969*
Jerrold S. Maxmen. *B.A., Wayne State, 1963; M.D., 1967*
John M. Oldham. *B.S., Duke, 1962; M.D., Baylor, 1967*
Ronald O. Rieder. *B.A., Harvard, 1958; M.D., 1964*
Bernard T. Walsh. *B.A., Princeton, 1967; M.D., Harvard, 1972*
Stuart Yudofsky. *B.A., New York University, 1966; M.D., Baylor, 1970*

Associate Professors of Clinical Psychology

Judith V. Becker. *B.S., Gonzaga (Washington), 1966; M.S., Eastern Washington State, 1968; Ph.D., Mississippi, 1975*
W. Crawford Clark. *Ph.D., Michigan, 1958*
David Friedman. *B.A., Queens, 1965; M.A., 1968; Ph.D., City University of New York, 1972*
Dennis D. Kelly. *Ph.D., Columbia, 1966*
Heino F. L. Meyer-Bahlburg. *Ph.D., Dusseldorf, 1970*
Judith Rabkin (Epidemiology). *B.A., Wellesley, 1958; Ph.D., New York University, 1967; M.P.H., Columbia, 1974*
Michael Terman. *B.A., Columbia, 1964; Sc.M., Brown, 1966; Ph.D., 1968*
Janet B. Williams. *B.S., Tufts, 1969; M.S., Southeastern Massachusetts, 1972; M.S.W., Columbia, 1974*

Associate Professors of Clinical Psychopharmacology

Thomas Cooper. *M.A., Fairleigh Dickinson University, 1970*
Michael Stanley. *M.Phil., City University of New York, 1978; Ph.D., Mt. Sinai, 1979*

Associate Clinical Professors

Clemens Christian Beels. *B.A., Rochester, 1960; M.D., Harvard, 1963*
Anne E. Bernstein. *B.A., Barnard, 1958; M.D., Albert Einstein, 1962*
Ian Alberto Canino. *B.S., Georgetown, 1966; M.D., Puerto Rico, 1970*
William J. Chambers. *B.A., Princeton, 1967; M.D., Tufts, 1972*
Stanley Coen. *B.A., Columbia, 1958; M.D., 1962*
Carol L. M. Caton (in Public Health). *B.S., Columbia, 1962; Ph.D., Yale, 1969*
Gladys Egri. *B.A., Barcelona, 1949; M.D., 1962*
Gloria Faretra. *M.D., Georgetown, 1952*
Rodman Gilder, Jr. *M.D., Columbia, 1944*
Robert Glick. *B.A., Yale, 1962; M.D., Columbia, 1966*
Arthur Green. *B.A., Rochester, 1951; M.D., Amsterdam (The Netherlands), 1955*
Stanley Heller. *B.A., Yale, 1956; M.D., Columbia, 1960*

Steven E. Hyler. *B.A., New York University, 1971; M.D., New York Medical College, 1975*
Stuart L. Kaplan. *B.A., George Washington, 1961; M.D., 1965*
Frederick Kass. *B.A., Harvard, 1966; M.D., Johns Hopkins, 1970*
Neil B. Kavey. *B.A., Princeton, 1965; M.D., Columbia, 1969*
Samuel Klagsbrun. *B.A., City College of New York, 1955; B.R.E., Jewish Theological Seminary, 1954; M.D., Chicago Medical School, 1962*
Gilbert W. Kliman. *B.A., Cincinnati, 1949; M.D., Harvard, 1953*
Thomas Kranjac. *B.A., New York University, 1970; M.D., New York Medical College, 1975*
Stephen Levitan. *B.A., New York University, 1961; M.D., Buffalo, 1965*
Frederick Lane. *B.A., Cornell, 1949; M.D., Yale, 1953*
Alan M. Levy. *B.A., Cornell, 1947; M.A., 1948; M.D., New York Medical College, 1954*
Eric Marcus (also Medicine). *B.A., Columbia, 1965; M.D., Wisconsin, 1969*
Michael Milano. *B.A., Harvard, 1960; M.D., Stanford, 1958*
John F. O'Connor. *B.S., Columbia, 1948; M.D., State University of New York, 1952*
Seymour Post. *M.D., New York University, 1947*
Arnold Rothstein. *B.A., Brown, 1958; M.D., Chicago Medical School, 1962*
Safa Saribeyoglu. *M.D., Istanbul, 1958*
Daniel Shapiro. *M.D., Illinois, 1945*
Leonard M. Sheehy. *B.A., Harvard, 1960; M.D., McGill, 1968*
Andrew Skodol. *B.A., Yale, 1967; M.D., Pennsylvania, 1971*
Henry I. Spitz. *B.A., Lafayette (Pennsylvania), 1961; M.D., New York Medical College, 1965*
Gail L. Wasserman. *B.A., Pennsylvania, 1967; M.D., Illinois, 1970; Ph.D., City University of New York, 1977*
Josef Weissberg. *M.D., Albany Medical College, 1952*
Daniel T. Williams. *B.A., Columbia, 1965; M.D., Cornell, 1969*

Associate Clinical Professors of Medical Psychology

Kenneth Frank. *M.S., Columbia, 1964; Ph.D., 1960*
Wilma Rosen. *B.A., Cedar Crest (Pennsylvania), 1967; M.S., Clark, 1969; M.D., 1973*
Mary Jane Rotheram. *B.A., California (Irvine), 1971; Ph.D., Southern California, 1977*

Research Scientist

Morton Levitt. *M.S., George Washington, 1959; Ph.D., Howard, 1966*

Assistant Professors of Clinical Neurobiology and Behavior

Robert D. Hawkins. *B.A., Stanford, 1968; M.A., California (San Diego), 1969; Ph.D., 1973*
John Martin. *B.A., Rhode Island, 1973; M.A., Columbia, 1974; Ph.D., 1978*

Assistant Professors of Clinical Psychiatry

Stan David Arkow. *B.S., State University of New York (Stony Brook), 1973; M.D., Columbia, 1977*
William J. Chambers. *B.A., Princeton, 1967; M.D., Tufts, 1972*
Sheldon Frank. *B.A., Swarthmore, 1960; M.A., Pennsylvania, 1962; M.D., Johns Hopkins, 1966*
Abby Joy Fyer. *B.A., Reed, 1969; M.D., New York University, 1973*
Robert L. Goldstein. *M.D., Columbia, 1965; J.D., 1984*
Paul Joel Goodnick. *B.A., Pennsylvania, 1972; M.D., State University of New York (Downstate), 1976*
Madelyn Schwartz Gould. *A.A., Princeton, 1974; M.P.H., Columbia, 1976; M.Phil., 1978*
Kenneth Greenspan. *M.D., Albert Einstein, 1963*
Wilma M. Harrison. *B.A., Barnard, 1960; M.D., New York Medical College, 1966*
Andrei-Claudian Jaeger. *M.D., Medico-Pharmaceutical Institute (Romania), 1977*
Charles A. Kaufmann. *B.S., Massachusetts Institute of Technology, 1971; M.D., Columbia, 1977*
Patrick J. McGrath. *B.S., Seton Hall, 1970; M.D., Columbia, 1974*
Sukdeb Mukharjee. *M.D., Nihratan Sircar Medical College (India), 1969*
Philip R. Muskin. *B.A., Cornell, 1969; M.D., New York Medical College, 1974*

Joan Prudic. *B.S., Michigan, 1973; M.D., 1977*
Steven Paul Roose. *B.A., Harvard, 1970; M.D., Mt. Sinai, 1974*
Lawrence Sharpe. *D.P.M., London, 1961*
Jonathan M. Silver. *B.A., Duke, 1975; M.D., Albert Einstein, 1979*
Paul Douglas Trautman. *B.A., Lehigh, 1971; M.D., State University of New York (Buffalo), 1975*

Assistant Professors of Clinical Psychology

Stephen C. Brake. *B.A., Texas, 1971; Ph.D., 1976*
Edward Scott Charles. *B.A., City University of New York, 1965; M.A., 1968; M.A., New School for Social Research, 1974*
Donald J. Dillon. *Ph.D., Fordham, 1955*
William P. Fifer. *B.S., Georgetown, 1970; M.A., North Carolina (Greensboro), 1976; Ph.D., 1980*
Richard W. Gaines. *B.A., Middlebury, 1969; Ph.D., New York University, 1985*
Rita Haggerty. *B.A., Fordham, 1970; Ph.D., State University of New York (Stony Brook), 1976*
Helen Hanesian. *B.S., State University College (Buffalo), 1953; M.A., Columbia, 1961; Ed.D., 1966*
Donald E. Hutchings (also Pediatrics). *Ph.D., Columbia, 1965*
Maureen Kanzler. *B.A., Hunter, 1938; M.A., New York University, 1940; M.S., Hunter, 1959; Ph.D., Fordham, 1967*
Stephen E. Karpiak. *Ph.D., Fordham, 1972*
Dolores Kreisman. *B.A., Barnard, 1953; Ph.D., Columbia, 1969*
Jesse Bernard Levine. *Ph.D., George Washington, 1976*
Ronnie Lee Levine. *B.S., Cornell, 1971; M.A., Adelphi, 1973; Ph.D., 1976*
Salvatore Mannuzzi. *Ph.D., City University of New York, 1982*
Michael M. Myers. *B.A., Connecticut (Storrs), 1971; M.S., 1974; Ph.D., 1976*
Craig E. Polite. *B.A., Toledo, 1969; M.A., Michigan State, 1971; Ph.D., 1972*
Stephanie Portnoy. *Ph.D., Columbia, 1968*
Michael Potegal. *B.S., City College of New York, 1963; Ph.D., Massachusetts Institute of Technology, 1969*
Michael Seth Quittman. *B.A., Queens (New York), 1968; Ph.D., Purdue, 1974*
Sergio Rothstein. *B.A., Yeshiva, 1965; Ph.D., 1973*
Richard P. Sloan. *B.S., Union (Schenectady), 1970; Ph.D., New School for Social Research, 1978*
Cornelis Stokman. *B.A., Nijmegen (Holland), 1962; M.A., Columbia, 1964; Ph.D., 1967*
Jeffrey Young. *B.A., Yale, 1972; Ph.D., Pennsylvania, 1978*

Assistant Professor of Clinical Neuropsychology

Isak Prohovnik. *M.Sc., Lund (Sweden), 1980; Ph.D., 1981*

Assistant Professor of Clinical Psychiatric Social Work

Barbara Von Bulow. *B.A., Duke, 1964; M.S.W., Columbia, 1968*

Assistant Professors of Clinical Social Sciences

Alexander Askenazy. *Ph.D., Columbia, 1962*
Muriel Hammer. *Ph.D., Columbia, 1961*

Assistant Professor of Clinical Social Work

Nettie Terestman. *M.S.W., Columbia, 1940; D.S.W., 1963*

Assistant Clinical Professors

Syed Abdullah. *M.A., Calcutta, 1961; M.B., 1962*
Harry D. Albert. *B.A., Johns Hopkins, 1962; M.D., 1965*
Carmen M. Alonso. *B.A., New York University, 1973; M.D., New York Medical College, 1976*
Morton J. Aronson. *B.A., Temple, 1944; M.D., 1947*

John A. Atchley. *M.D., Columbia, 1944*
Athanasia Balkoura. *M.D., Athens, 1960*
John Joseph Barsa. *B.S., Massachusetts Institute of Technology, 1973; M.D., Columbia, 1977*
Leah Beck. *M.D., Women's Medical College of Pennsylvania, 1943*
Robinette Bell. *B.A., Smith, 1951; M.D., Columbia, 1962*
Raymond Bernick. *B.S., Dalhousie, 1956; M.D., 1961*
Carol A. Bernstein. *B.A., Bryn Mawr, 1969; M.A., Antioch, 1971; M.D., Columbia, 1980*
Stanley Bone. *B.S., Massachusetts Institute of Technology, 1970; M.D., Mt. Sinai, 1974*
Edward N. Brennan. *B.S., Trinity (Hartford), 1951; M.D., Yale, 1955*
Richard Brockman. *B.A., Williams, 1969; M.D., New York Medical College, 1975*
A. Alexis Brosen. *B.A., City College of New York, 1973; M.D., New York University, 1977*
Paul F. Califano. *B.A., Adelphi, 1950; M.D., State University of New York (Downstate), 1954*
Robert J. Campbell. *B.A., Wisconsin, 1944; M.D., Columbia, 1948*
Raphael Campeas. *B.A., Tuoro (New York), 1975; M.D., Mt. Sinai, 1979*
Harvey R. Chertoff. *B.A., Columbia, 1962; M.D., Albert Einstein, 1966*
Daniel Elliot Cohen. *B.A., Columbia, 1967; M.D., 1971*
Frances Cohen. *B.A., Harvard, 1971; M.D., Columbia, 1975*
Max P. Cohen. *M.D., New York Medical College, 1947*
Louise Coleman. *M.D., Southern California, 1948*
Francine Cournos. *B.S., City College of New York, 1967; M.D., New York University, 1971*
DeWitt L. Crandell. *M.D., Arkansas, 1955*
Barbara H. DeBetz. *M.D., Miami, 1970*
Paola Decina. *M.D., Rome, 1968*
Zira De Fries. *M.D., New York Medical College, 1942*
Leonard Diamond. *B.A., Tulane, 1949; M.D., State University of New York (Downstate), 1973*
Jennifer I. Downey. *B.A., Harvard, 1967; M.A., California (Berkeley), 1968; M.D., Case Western, 1976*
Paula Eagle. *B.A., California (Berkeley), 1974; M.D., New York University, 1978*
Robert M. Elvolve. *B.A., Michigan, 1962; M.D., Chicago, 1966*
Charles F. Entelis. *M.D., Virginia, 1974*
Bruce W. Fader. *B.A., New York University, 1963; M.D., Miami, 1967*
Katherine Falk. *B.A., Barnard, 1966; M.D., Mt. Sinai, 1970*
James W. Flax. *B.A., Antioch, 1971; M.D., Minnesota, 1974*
Gerald I. Fogel. *M.D., Michigan, 1962*
Bruce Forester. *B.A., Dartmouth, 1961; M.D., Columbia, 1965*
Eugene A. Friedberg. *M.D., Buffalo, 1958*
Cathy Jane Friedman. *M.D., State University of New York (Downstate), 1981*
Lee R. Gardner. *B.A., Barnard, 1955; M.D., Columbia, 1959*
Myron R. Gershberg. *B.A., Cornell, 1955; M.D., 1956; M.D., Buffalo, 1960*
Iona H. Ginsburg. *B.A., Vassar, 1953; M.D., Columbia, 1957*
Richard J. Glavin. *B.A., Cornell, 1951; M.D., Rochester, 1955*
Ana B. Glick. *B.A., Bennington, 1958; M.D., New York Medical College, 1963*
Edwin Goldstein (in Pediatrics). *B.A., Brooklyn, 1952; M.D., Union (Albany), 1958*
Lloyd A. Hamilton, Jr. *B.A., Yale, 1950; M.D., Harvard, 1954*
Martin V. Hart. *M.D., State University of New York (Downstate), 1950*
Rose Hartmann. *B.A., New York University, 1937; M.D., Women's Medical, 1945*
Myra S. Hatterer. *B.A., New York University, 1955; M.D., New York Medical College, 1959*
Gregory Heimark. *B.A., St. Olaf (Minnesota), 1956; M.D., Columbia, 1960*
Michelle L. Hirsch. *B.S., City College, 1968; M.D., State University of New York (Syracuse), 1973*
Joel S. Hoffman. *B.A., Harvard, 1959; M.D., Columbia, 1962*
Ewald Horwath. *B.A., Chicago, 1975; M.D., 1979*
Wynn K. Jackson. *B.A., Oklahoma, 1970; M.D., Chicago, 1979*
Roberta Jaeger. *B.A., Barnard, 1963; M.D., Columbia, 1966*
David Jaffe. *M.D., Jefferson, 1950*
David Alan Kahn. *B.A., Haverford, 1975; M.D., Columbia, 1979*
Jeffrey Paul Kahn. *B.A., Swarthmore, 1975; M.D., Columbia, 1979*
Lila J. Kalinich. *B.A., Northwestern, 1966; M.D., 1969*

Sherry P. Katz-Bearnot. *B.A., Barnard, 1973; M.D., Mt. Sinai, 1977*
Robert Michael Kertzner. *B.A., Cornell, 1974; M.D., Columbia, 1978*
Harold S. Koplewicz. *B.S., Maryland, 1973; M.D., Einstein, 1978*
Peter Laderman. *B.S., College of the City of New York, 1940; M.D., New York Medical College, 1947*
Luch Bergson La Farge. *B.A., Radcliffe, 1969; M.D., Albert Einstein, 1976*
Leon Lefer. *B.A., New York University, 1941; M.D., Lausanne, 1952*
David Y. Levine. *M.D., New York University, 1961*
Laurence S. Lorefice. *B.A., Johns Hopkins, 1971; M.P.H., Harvard, 1979; M.D., Pennsylvania, 1975*
Andrew C. Lotterman. *B.A., Yale, 1972; M.D., Mt. Sinai, 1976*
George Luhrmann. *B.S., Massachusetts Institute of Technology, 1957; M.D., Columbia, 1965*
William McFarlane. *B.A., Earlham (Indiana), 1965; M.D., Columbia, 1970*
Lisa Ann Mellman. *B.A., Colorado (Boulder), 1976; M.D., Case Western Reserve, 1981*
Frederick Mendelsohn. *B.A., Harvard, 1954; M.D., Stanford, 1958*
Craig M. Morris. *B.S., City College of New York, 1966; M.D., Albert Einstein, 1970*
Robert S. Mumford. *M.D., McGill, 1943*
Joseph C. Napoli. *B.A., Fordham, 1968; M.D., Georgetown, 1972*
Jaime Nos. *M.D., Valencia (Spain), 1967; M.P.H., Columbia, 1975*
David Douglas Olds. *B.A., Yale, 1960; M.D., Columbia, 1981*
Louis Padovano. *B.S., Georgetown, 1952; M.D., 1956*
Patricio R. Paez. *M.D., Chile, 1972*
Robert P. Parkin. *M.D., Dalhousie (Canada), 1950*
David Peretz. *B.A., College of the City of New York, 1954; M.A., Columbia, 1955; M.D., New York University, 1959*
Nancy Q. Petersmeyer. *B.A., Yale, 1976; M.D., Harvard, 1980*
Jeffrey M. Pines. *B.A., Columbia, 1969; M.D., 1973*
Kathryn F. Prescott. *M.D., New York University, 1950*
Harris Rabinovich. *B.E.S., Johns Hopkins, 1959; M.S., Maryland, 1965; M.D., 1969*
Jeffrey S. Rosecan. *B.A., Columbia, 1974; M.D., 1978*
Lyle E. Rosnick. *B.A., Columbia, 1970; M.D., 1974*
Boris Rubinstein. (also Pediatrics). *B.A., Colegio Israelita (Mexico City), 1961; M.D., Nacional (Mexico), 1970; M.P.H., Harvard, 1974*
Barbara Sacco. *R.N., Mary Immaculate Hospital School of Nursing, 1958*
M. Bruce Sarlin. *B.A., M.D., Tulane, 1957*
Pellegrino J. Sarti. *B.S., Fordham, 1970; M.D., Bologna, 1977*
Murray David Schane. *B.A., Wayne State, 1961; M.D., Stanford, 1968*
Lawrence Shaderowfsky. *B.A., Chicago, 1956; M.D., New York Medical School, 1960*
Peter A. Shapiro. *B.A., Princeton, 1976; M.D., Columbia, 1980*
Edward M. Shelley. *B.A., Columbia, 1960; M.D., State University of New York (Downstate), 1958*
Charles Siegal. *B.A., New York University, 1954; M.D., State University of New York (Downstate), 1958*
Frieda H. Spady. *B.S., Columbia, 1963; M.D., New York Medical College, 1967*
H. David Stein. *B.A., Brandeis, 1975; M.D., Columbia, 1979*
Laurie Ann Stevens. *B.A., Yale, 1975; M.D., Columbia, 1979*
Jonathan W. Stewart. *B.A., Swarthmore, 1967; M.D., Yale, 1971*
Diane L. Stone. *B.A., Pennsylvania, 1966; M.D., Columbia, 1970*
Susan M. Sussman. *B.A., Cornell, 1976; Ph.D., American, 1983*
Rafael Tavaras. *B.Ch.E., Manhattan, 1967; M.S.Ch.E., Massachusetts, 1970; M.D., Yale, 1978*
Eleanor M. Townsend. *B.A., Sarah Lawrence, 1957; M.D., Columbia, 1961*
Ann R. Turkel. *B.A., Barnard, 1947; M.D., Albany, 1952*
Martin Weiler. *B.A., Syracuse, 1949; M.A., Columbia, 1951; M.D., Chicago Medical School, 1954*
Agnes H. Whitaker. *B.A., Antioch, 1972; M.D., Rutgers, 1976*
George H. Wilkie. *M.D., Harvard, 1957*
Donald A. Winn. *M.D., Oklahoma, 1957*
Beth K. Yudofsky. *B.A., Smith, 1972; M.D., Columbia, 1976*

Assistant Clinical Professor of Pediatric Psychology

Jeannette J. Jansky. *M.S., College of the City of New York, 1960; Ph.D., Columbia, 1970*

Assistant Clinical Professors of Medical Psychology

Aryeh Anavi. *M.A., Hebrew, 1950; Ph.D., Boston, 1963*
Elizabeth W. Auriccho. *M.A., Fordham, 1965; Ph.D., 1972*
Mark J. Blechner. *M.S., Yale, 1975; Ph.D., 1977*
Melinda Broman. *B.A., Cornell, 1967; Ph.D., Rutgers, 1977*
Walter Inz. *B.A., New York University, 1950; M.D., College of the City of New York, 1952; Ph.D., Columbia, 1974*

Assistant Clinical Professors of Psychiatric Social Work

Miriam Gibbon. *B.A., Antioch, 1954; M.S.W., Columbia, 1957*
Bobba Jean Moody. *B.A., Hunter, 1964; M.S.W., Fordham, 1968*

Associate Research Scientists

Samuel W. Anderson. *B.A., George Washington, 1958; Ph.D., Harvard, 1965*
David P. Birkett. *M.B.,B.Ch., South Wales, 1957*
Richard L. Blumenthal. *B.A., Cornell, 1947; M.A., New School for Social Research, 1951; Ph.D., New York University, 1961*
Barbara Ann Cornblatt. *B.A., Syracuse, 1964; M.B.A., City University of New York, 1977; Ph.D., New School for Social Research, 1978*
Ralph G. Crawford. *M.S., Auburn, 1978; Ph.D., Medical College of Virginia, 1984*
Cynthia L. Crown. *B.A., Maryland, 1978; M.A., 1980; Ph.D., Delaware, 1984*
Basalingappa Hungund. *B.Sc., Kanatah (Dharwar, India), 1962; M.Sc., 1964; Ph.D., National Chemical Laboratory (Poona, India), 1968*
Michael D. Jasnow. *B.A., Clark, 1973; M.A., New York University, 1977; Ph.D., George Washington, 1983*
Mitchell L. Kietzman. *Ph.D., California (Los Angeles), 1962*
Mary S. Mittelman. *M.S., Columbia, 1969; Dr.P.H., 1980*
John Nee. *B.S., National Taiwan, 1966; Ph.D., Pennsylvania State, 1973; M.P.H., Columbia, 1977*
Arthur S. Perumal. *B.Sc., Madras, 1958; M.Sc., 1963; Ph.D., Indian Institute of Science, 1969*
Graham F. Pringle. *Ph.D., New York University, 1982*
Kurt Salzinger. *Ph.D., Columbia, 1954*
Suzanne Salzinger. *Ph.D., Columbia, 1964*
David E. Wilder. *Ph.D., Columbia, 1959*

SPECIAL LECTURERS
Viola W. Bernard, M.D.
John Cedarquist, M.D.
John A. Cook, M.D.
George Eaton Daniels, M.D.
Katrina De Hirsch, B.A.
Samuel Feder, M.D.
Marjorie H. Frank
Lothar Gidro-Frank, M.D.
Murray Glusman, M.D.
William Goldfarb, M.D.
George Goldman, M.D.
Soll Goodman, M.D.
Henriette R. Klein, M.D.
Lawrence C. Kolb, M.D.
Mary MacKay, M.D.
Lionel Ovesey, M.D.

SPECIAL LECTURERS *(continued)*
Herbert Spiegel, M.D.
Leo Srole, M.D.
Bluma Swerdloff, D.S.W.
Alberta Szalita, M.D.
Virginia Wilking, M.D.
Joseph Zubin, M.D.

LECTURERS
Rhianon Allen, M.D.
Kenneth Z. Altschuler, M.D.
Ann H. Appelbaum, M.D.
Jacob A. Arlow, M.D.
Stuart A. Asch, M.D.
Henry Bachrach, Ph.D.
Bruce Ballard, M.D.
Jose Barchilon, M.D.

LECTURERS *(continued)*
Beatrice Beebe, M.D.
Milton M. Berger, M.D.
Marion S. Blank, Ph.D.
Henry Brill, M.D.
Alexander Broden, M.D.
Gerard E. Bruder, Ph.D.
Thomas James Carew, M.D.
Arnold M. Cooper, M.D.
Richard J. Davidson, Ph.D.
Lawrence Deutsch, M.D.
Stanley Feldstein, M.D.
Allen Frances, M.D.
Sheldon Gaylin, M.D.
Barbara Gilliam-Lawergren, Ph.D.
Matthew Gold, M.S.
Eugene L. Goldberg, M.D.
Marianne R. Goldberger, M.D.
David S. Goldman, M.D.
Lillian Gross, M.D.
William I. Grossman, Ph.D.
Gad Hakerem, Ph.D.
Ellen Hollander, M.D.
Richard A. Isay, M.D.
Jerome Jaffe, M.D.
Stephen C. Josephson
John M. Kane, M.D.
Steven E. Katz, M.D.
Otto F. Kernberg, M.D.
Paulina Kerberg, M.D.
Ee-Sing Lo, Ph.D.
Harriet N. Mischel, Ph.D.
Muriel Morris, M.D.
Wayne A. Myers, M.D.
Abbas Nahas, M.D.
Samuel W. Perry III, M.D.
Michael S. Porder, M.D.
Robert W. Rieber, Ph.D.
Bennett L. Rosner, M.D.
Ellen Rowntree, M.D.
Franklin D. Russek, M.D.
Harold Sackeim, Ph.D.
Michael Sacks, M.P.H.
Roy Schafer, Ph.D.
Jonah W. Schein, M.D.
Herbert J. Schlesinger, Ph.D.
Jesse Schomer, M.D.
Irvin S. Schonfeld, Ph.D.
Geri Ellen Schwartz, Ph.D.
Sally Severino, M.D.
Barbara H. Stanley, Ph.D.
Leo Stone, M.D.
Michael Stone, M.D.
Manuel Trujillo, M.D.
Milton Viederman, M.D.
Marvin Wasserman, M.D.
Martin S. Willick, M.D.

ASSOCIATES IN CLINICAL PSYCHIATRY
Burton C. August, M.D.
Donald C. Bell, M.D.
Carla S. Deichman, M.S.
Ivan Goldberg, M.D.
Gurston Goldin, M.D.
Arthur R. Jacobs, M.D.
Bonnie Kaufman, M.D.
Naomi Leiter, M.D.
Ira L. Mintz, M.D.
Phyllis B. Robbins, M.D.
Gloria Jean Stern, M.D.
Gerda Strika, M.D.
Hector O. Varas, M.D.

ASSOCIATE IN CLINICAL PSYCHIATRIC SOCIAL WORK
Ellen Lukens, M.S.W.

INSTRUCTORS IN CLINICAL PSYCHIATRY
Geary E. Ahern, M.D.
Joanne Ahola, M.D.
Satwani Ahluwahlia, M.B.B.S.
Goldie Alfasi, Ph.D.
Rena Lee Appel, M.D.
Robert B. Aranow, M.D.
Barbara J. Bouley, M.A.
Eve Caligor, M.D.
Janel S. Carino, M.D.
Leon Chattah, M.D.
Cheryl H. Cottrol, M.D.
Jerry Cunningham-Rathner
Kent Cunow, Ph.D.
Susan M. Deakins, M.D.
Michael J. Devlin, M.D.
Zelda Diatlo, M.S.W.
Dominic DiFabio, M.D.
Edward J. Dunne, Ph.D.
Margaret M. Eaton, Psy.D.
William A. Fisher, M.D.
Sylvia M. Furstenberg, M.D.
Raymond R. Goetz, Ph.D.
Karen Goldberg, M.S.W.
Nannette Goldstein, M.D.
Lauren Kantor Gorman, M.D.
Rosalie Greenberg, M.D.
Deborah S. Hamm, M.D.
Deena R. Harris, M.D.
Stanley M. Hertz, M.D.
Martin J. Hoffman, M.S.
Eric Hollander, M.D.
Lawrence Jacobsberg, M.D.
Celeste A. Jacque, M.D.
Kevin Kalikow, M.D.
William H. Kaplan, M.D.
Jonathan F. Katz, Ph.D.

INSTRUCTORS *(continued)*
Susan Campbell Katz, M.D.
Richard J. Kavoussi, M.D.
Howard David Kellman, M.D.
Richard A. Kresch, M.D.
J. Carl Lee, M.D.
Owen William Lewis, M.D.
David C. Lindy, M.D.
Barbara Ann Liskin, M.D.
Julie Ann Low, M.D.
Cesar A. Matos, M.D.
Robert D. McMullen, M.D.
Jean Keller Miller, M.D.
Kenneth P. Mitchell, Jr., M.D.
Josefina Moneda, M.D.
Beatrice Moscovici, M.D.
Reed C. D. Moskowitz, M.D.
Edward V. Nunes, M.D.
Rodolfo Pinzon, M.D.
Richard R. Pleak, M.D.
Marilu Puertollano, M.D.
Humberto Quintana, M.D.
Rogelio Roncal, M.D.
Stephen D. Roth, M.D.
Sandra Rosenbaum, Ed.D.
Diane P. Sandberg, M.D.
Rafaek Sanjuan, M.D.
Robert Santulli, M.D.
David B. Schnur, M.D.
Murray D. Schane, M.D.
Jonathan R. Schwartz, M.D.
Beth June Seelig, M.D.
Susan Seidman, Ph.D.
Peter A. Shapiro, M.D.
Jonathan M. Silver, M.D.
Jose Manuel Soto, M.D.
H. David Stein, M.D.
Militza Stevanovic, M.D.
Ellen M. Stevenson, M.D.
Katerina Tsirilaki, M.D.
Fernando Viano, M.D.
Miguel Villaro-Colon, M.D.
Evelyn R. Wasserman, M.D.
Ronald M. Winchel, M.D.

INSTRUCTORS IN CLINICAL PSYCHOLOGY
Ilana Appleby, Ph.D.
Ngaere Baxter, Ph.D.
Robert M. Bilder, Jr., Ph.D.
Susan P. Brinkworth, M.A.
Sandra Buechler, Ph.D.
Steven L. Demby, Ph.D.
Mark Gerald, Ph.D.
Bonnie Horen, M.A.
Meg S. Kaplan, Ph.D.
Edward L. Maclin, Ph.D.
Julie Jarett Marcuse, Ph.D.
Robert S. Schachter, M.D.
Jennifer Schaffer, Ph.D.
Linda S. Skinner, Ph.D.
Fay Stetner, M.S.
Robert I. Watson, M.D.
Gerald R. Yagoda, Ph.D.

INSTRUCTOR IN CLINICAL PSYCHIATRIC SOCIAL WORK
Stephanie Katz, M.S.W.

INSTRUCTORS IN CLINICAL SOCIAL WORK
Natalie F. Been, M.S.W.
Bruce Y. Bleecker, M.S.W.
Susan Braiman, M.S.W.
Elizabeth Golden, M.S.W.
Miriam Bette Gutmann, M.D.
Sally Lord, M.S.W.
Stephen D. Rosenheck, M.S.W.
Carla Sadik, M.S.W.
Reggie Swenson, M.S.W.
Michael Welikson, M.S.W.
Anna C. Welton, M.S.W.

At Mary Imogene Bassett Hospital

Associate Clinical Professor

Harvey Gurian. *M.D., Toronto, 1949*

Assistant Clinical Professors

Larry Kenneth Brown. *B.S., Maryland, 1972; M.D., Columbia, 1976*
John E. Denny. *Ph.D., Massachusetts, 1971*
Charles J. Hudson. *B.A., Princeton, 1959; M.D., McGill, 1963*
Charles W. Lamb. *Ph.D., Ohio State, 1966*

ASSOCIATE IN CLINICAL PSYCHIATRY
Peter M. Johngren, M.D.

ASSOCIATE IN CLINICAL PSYCHOLOGY
Linda Beth Steven, Ph.D.

At Harlem Hospital

Clinical Professor

James L. Curtis. *B.A., Albion, 1944; M.D., Michigan, 1946*

Assistant Professor of Clinical Psychiatry

Peter H. Schween. *M.D., Hamburg, 1955*

Assistant Clinical Professors

Sumansiri Alahendra. *M.B.B.S., Ceylon (Sri Lanka),*
Stephen L. Bennett. *B.S., Queens, 1949; M.D., Cornell, 1953*
Shale Brownstein. *B.A., State University of New York (Buffalo), 1955; M.D., 1959*
Frank Jewett (in Dentistry). *B.A., Yale, 1953; M.D., Columbia, 1957*
Stanislaw P. Jonas. *M.D., Medical Academy (Warsaw), 1958*
Milton Lee. *B.A., Columbia, 1952; M.D., New York Medical College, 1956*
Raymond Raskin. *B.A., New York University, 1942; M.D., 1946*
Hana Rostain. *M.D., Buenos Aires, 1952*
Sady Sultan. *M.D., Universidad Central de Venezuela, 1971*
Robert L. Walton. *M.B.B.S., Melbourne, 1966*

LECTURERS
Mark R. Mankoff, M.D.
Sheldon Zimberg, M.D.

INSTRUCTORS IN CLINICAL PSYCHIATRY
Joseph E. Charles, M.D.
Augustin A. Gomez, M.D.
Frank F. Thompson, M.D.

INSTRUCTOR IN CLINICAL PSYCHOLOGY
Carol Garmiza, Ph.D.

At Helen Hayes Hospital

INSTRUCTOR IN CLINICAL PSYCHIATRY
Karl J. Schroeder, M.D.

At Morristown Memorial Hospital

Assistant Clinical Professors

Richard A. Dickes. *B.A.,Columbia, 1963; M.D., Albert Einstein, 1967*
Harvey M. Hammer. *B.A., Cornell, 1956; M.D., New York Medical College, 1960*

LECTURER
Roger B. Granet, M.D.

ASSOCIATE IN CLINICAL PSYCHIATRY
Sherry Barron-Seabrook, M.D.

At Overlook Hospital

Assistant Clinical Professors

Albert M. Bromberg. *B.S., College of William and Mary, 1953; M.D., Duke, 1957*
Daniel J. O'Connell. *B.A., Fordham, 1953; M.D., Cornell, 1961*
Linus Root. *B.S., Georgetown, 1953; M.D., 1957*
Ronald Sorvino. *B.S., St. John's (New York), 1954; M.D., State University of New York (Downstate), 1958*

LECTURER
Morton Friedman, M.D.

At St. Luke's–Roosevelt Hospital

Associate Clinical Professors

Gary Lee Lefer. *B.S., Stanford, 1962; M.D., Georgetown, 1966*
David D. MacDonald. *B.S., Oregon, 1945; M.D., Tufts, 1949*
Stephen P. Reibel. *B.A., Harvard, 1957; M.D., 1961*
Joel Solomon. *M.D., Lausanne, 1968*

Associate Clinical Professors of Medical Psychology

James D. Meltzer. *B.A., Columbia, 1968; Ph.D., New York University, 1973*
Adam Munz. *Ph.D., New York University, 1969*

Assistant Professors of Clinical Psychiatry

Shepard J. Kantor. *B.A., Colby, 1965; M.D., Johns Hopkins, 1969*
Larry Kirsten. *B.A., Clark, 1967; M.D., State University of New York (Downstate), 1971*

Assistant Professor of Clinical Psychology

Harry Kissileff. *B.A., Pennsylvania, 1962; Ph.D., 1966*

Assistant Clinical Professors

Gail B. Allen. *B.A., Wellesley, 1957. M.D., New York University, 1961*
Frederic A. Alling. *B.A., Princeton, 1952; M.D., Columbia, 1961*
Alex Caemmerer, Jr. *B.A., Princeton, 1944; M.D., Columbia, 1947*
Kathleen Degen. *B.A., St. Joseph's, 1967; M.D., Bologna, 1972*
Paul Dince. *M.D., New York University, 1948*
Nathaniel Donson. *B.A., Cornell, 1958; M.D., New York University, 1962*
Bruce W. Fader. *B.A., New York University, 1963; M.D., Miami, 1967*
John A. Fogelman. *B.A., Columbia, 1959; M.D., State University of New York (Downstate), 1964*
Januscz G. Gorzynski. *M.D., Academy of Medicine (Warsaw), 1963*
James G. Katis. *B.A., Wesleyan, 1956; M.D., McGill, 1960*
Leo Kron. *M.D., British Columbia, 1971*
Eugene Mahon. *M.D., National (Ireland), 1964*
James M. McGowan. *B.A., Notre Dame, 1960; M.D., Kentucky, 1964*
John A. Milici. *B.A., Yale, 1947; M.D., Geneva (Switzerland), 1957*
Howard Millman. *B.A., Cornell, 1965; M.D., New York University, 1969*
Paul William Nassar. *B.A., New York University, 1963; M.D., Rome, 1968*
Jeffrey R. Nurenberg. *B.A., Boston; M.D., 1969*
Kenneth Porter. *B.A., Harvard, 1963; M.D., Albert Einstein, 1969*
Leslie Lynn Powers. *B.S., Boston College, 1970; M.D., Dartmouth, 1975*
John W. Rosenberger. *B.A., Dartmouth, 1956; M.D.C.M., McGill, 1960*

Barbara Rosenfeld. *B.A., California, 1949; M.D., Medical College of Pennsylvania, 1965*
Sirgay Sanger. *B.A., Harvard, 1956; M.D., 1960*
George Satran. *B.A., Columbia, 1952; New York University, 1956*
Robert D. Scharf. *B.S., Union, 1966; M.D., Albert Einstein, 1970*
Eleanor Schuker. *B.A., Swarthmore, 1961; M.D., Columbia, 1965*
Ira B. Silverstein. *B.A., Princeton, 1960; M.D., Pennsylvania, 1964*
William M. Tucker. *B.A., Harvard, 1962; M.A., Yale, 1965; M.D., Columbia, 1969*
Howard K. Welsh. *B.S., City College of New York, 1966; M.D., Albert Einstein, 1971*
Harvey L. White. *B.A., Harvard, 1959; M.D., New York Medical College, 1964*
C. Philip Wilson. *B.A., Yale, 1942; M.D., Columbia, 1945*

Assistant Clinical Professor of Medical Psychology

Philip M. Bromberg. *B.A., New York University, 1953; Ph.D., 1967*
Susan Winship Coates. *B.A., Sarah Lawrence, 1962; M.A., Vassar, 1968; Ph.D., New York University, 1976*
Barbara R. Cohn. *B.A., Indiana, 1965; Ph.D., New York University, 1974*
Ralph Colp, Jr. *B.A., Columbia, 1945; M.D., 1948*
Robert A. Cutick. *B.A., Brooklyn, 1957; M.A., Pennsylvania, 1961; Ph.D., 1962*
Andrew B. Druck. *B.A., City College (New York), 1969; M.A., Adelphi, 1973; Ph.D., 1974*

SPECIAL LECTURERS

Harry R. Potter, M.D.
John L. Schimel, M.D.
Lilli C. Shalsa, M.D.
Nestor J. Totero, M.D.
Militiades Zaphiropoulos

LECTURERS

Joseph Edward Arleo, M.D.
William C. Crain, M.D.
Juan-Carlos Echevarria, M.D.
Harriet Field, M.D.
Gloria Friedman, M.D.
Terry J. Golash, M.D.
Maurice R. Green, M.D.
Norman S. Handelman, M.D.
Lillian Kagan, M.D.
Jay Krawer, M.D.
Richard Lasky, Ph.D.
Andrew N. Looker, M.D.
Lois R. Mound, M.D.
Dagmar G. O'Connor, M.D.
Dale H. Ortmyer, Ph.D.
Edith B. Rubinstein, M.D.
Arthur J. Rudy, Ph.D.
Ellen F. Wachtel, M.D.
Steven J. Wein, M.D.

ASSOCIATES IN CLINICAL PSYCHIATRY

Salvadore E. Agaze, M.D.
Ted Eugene Becker, Jr., M.D.
William H. Brownlee, M.D.
Lucy E. Collins, M.D.
Alexander Elder, M.D.
Stephen C. Glassberg, M.D.
Sonia W. Hyman, M.D.
Lauma U. Katis, M.D.

ASSOCIATES *(continued)*

Allan M. Lans, M.D.
Ernesto Lozano, M.D.
Arthur M. Perlman, M.D.
Jonathan E. Rosenfeld, M.D.
Mitchell Rosenthal, M.D.
Ruth Szmarag, M.D.
William D. Wheat, M.D.

ASSOCIATES IN CLINICAL PSYCHOLOGY

Ruth N. Krawitz, Ph.D.
Ruth Wallach Mollod, Ph.D.
Phyllis L. Sloate, Ph.D.

INSTRUCTORS IN CLINICAL PSYCHIATRY

Peter Aldin, M.D.
Cyrus Aroomlooi, M.D.
Nigel M. Bark, M.D.
Charles Lee Bell, M.D.
Giovanni Biondi, M.D.
Arline C. Caldwell, M.D.
Victor D'Arc, M.D.
Laura Duval, M.D.
Keith Lee Einhorn, M.D.
Hanne E. Favelukes, M.D.
Harold M. Fogelman, M.D.
Elizabeth C. Frischauf, M.D.
Shirin Ghaemmaghami, M.D.
Joel Gonchar, M.D.
Maurice Haberman, M.D.
Charles G. Jackson, Jr., M.D.
David K. Jordan, M.D.
Kenneth R. Jungblut, M.D.
Ilana Kochen, M.D.
Jeffrey Koffler, M.D.
Marvin Roy Kremberg, M.D.

INSTRUCTORS *(continued)*
Woon Soon Lee, M.D.
Henry Clay Mallard, M.D.
Frederick John Matsner, M.D.
Helen G. Muhlbauer, M.D.
William S. Packard, M.D.
Henry A. Paul, M.D.
Michael W. Pawel, M.D.
V. Rachel Phillips, M.D.
Lazarao M. Pomeraniec, M.D.
Henry A. Remet, M.D.
Maria Rodriguez-Boulan, M.D.
George Edward Rowan, M.D.
Jeffrey H. Sacks, D.O.
Mona Schneider, M.D.
Carlotta L. Schuster, M.D.
Keith Sedlacek, M.D.
Christin M. Sekaer, M.D.

INSTRUCTORS *(continued)*
Jane Simon, M.D.
Victor Syrmis, M.B.,B.S.
Barbara B. Thacher, Ph.D.
Martha C. Troutman, M.D.
Maria C. L. Velez, M.D.
David S. Weinberger, M.D.
Henry W. J. Weisman, M.D.
Jane Zirin, M.D.

INSTRUCTORS IN CLINICAL PSYCHOLOGY
Shoshana M. Goldman, Ph.D.
Peter G. Lincoln, Ph.D.
Pasqual J. Pantone, M.D.
Marcia Rosen, Ph.D.
Roy Shapiro, Ph.D.

Public Health

Joseph R. Delamar Professor of Public Health Practice, Dean, and Chairman

Allan Rosenfield. *B.A., Harvard, 1955; M.D., Columbia, 1959*

Biostatistics

Professors

Joseph L. Fleiss (Division Head). *B.A., Columbia, 1959; M.S., 1961; Ph.D., 1967*
John Van Ryzin. *B.S., Marquette, 1957; M.S., 1959; Ph.D., Michigan State, 1964*

Adjunct Professor

Carl H. Erhardt. *B.B.A., College of the City of New York, 1941; M.P.A., New York University, 1957; M.S., Harvard, 1958; D.Sc., 1962*

Associate Professors of Clinical Public Health

Allen S. Ginsberg. *B.A., Cornell, 1958; M.S., 1959; Ph.D., Stanford, 1970*
Bruce Levin (in the Sergievsky Center). *B.A., Columbia, 1968; M.A., Harvard, 1972; Ph.D., 1974*
Patrick Shrout (in the Sergievsky Center). *B.A., St. Louis, 1972; Ph.D., Chicago, 1976*
Sylvan Wallenstein. *B.S., City College, 1966; Ph.D., Rutgers, 1971*

Assistant Professor

Gabrielle Kelly. *B.Sc., National (Ireland), 1975; M.Sc., 1976; Ph.D., Stanford, 1979*

Assistant Professor of Clinical Public Health

Carol A. Bodian. *B.a., Barnard, 1959; M.S., Columbia, 1971; Dr.P.H., 1983*

Senior Research Scientist

Neal W. Chilton. *B.S., College of the City of New York, 1939; D.D.S., New York University, 1942; M.P.H., Columbia, 1946*

Adjunct Assistant Professors

Donald C. Ross. *B.A., Rochester, 1955; M.A., North Carolina, 1957; Ph.D., 1960*
Martin Schnall. *B.A., Yeshiva, 1955; M.S., Columbia, 1957; M.B.A., New York University, 1974; Ph.D., American International, 1978*

LECTURERS
Judith D. Goldberg, Sc.D.
Robert Rosenfeld, Ph.D.
Andre A. O. Varma, M.D.
Alex Tytun, Dr.P.H.

RESEARCH ASSOCIATE
Livia R. Turgeon, M.S.

SPECIAL LECTURER
Molly Park, M.D.

Environmental Health Sciences

Professors

Dezider Grunberger (also Biochemistry) (in the Institute of Cancer Research). *M.Sc., Technical (Czechoslovakia), 1950; Ph.D., Czechoslovakia Academy of Sciences, 1956; Sc.D., 1968*
Leonard C. Harber (also Dermatology). *B.A., Johns Hopkins, 1949; M.D., New York University, 1953; M.S., 1959*
I. Bernard Weinstein (Division Head) (also Medicine) (in the Cancer Center). *B.S., Wisconsin, 1952; M.D., 1955*

Clinical Professor of Public Health

Granville H. Sewell. *B.S., Massachusetts Institute of Technology, 1959; Ph.D., 1966*

Assistant Professors

Leslie Andrews. *B.S., Providence, 1968; M.A., New York University, 1975; Dr.P.H., Columbia, 1985*
Paul Brandt-Rauf. *B.S., Columbia, 1970; M.S., 1973; Sc.D., 1974; M.D., 1979; M.P.H., 1980*
Frederica P. Perera. *B.A., Radcliff, 1963; M.P.H., Columbia, 1976; Dr.P.H., 1981*
Regina P. Santella. *B.S., Brooklyn, 1969; M.S., Massachusetts, 1971; Ph.D., City University of New York, 1976*

Associate Research Scientist

Tien-Hsi Young. *M.P.H., Harvard, 1975; M.D., National Taiwan, 1973*

Research Scientist

Alan M. Jeffrey. *B.S., Hull (United Kingdom), 1966; Ph.D., University College of North Wales (United Kingdom), 1970*

INSTRUCTORS
Jean B. Cropper, M.P.H.
Herman Ellis, M.D.
Ling-Ling Hsieh, Dr.P.H.
Michael McCann, Ph.D.
Dhun B. Patel, Ph.D.
Thomas T. Shen, Ph.D.
Haig-Michael D. Utidian, F.O.M.

Epidemiology

Professors

Jennifer L. Kelsey (Division Head). *B.A., Smith, 1964; M.P.H., Yale, 1966; M.Phil., 1968; Ph.D., 1969*

Bruce P. Dohrenwend (also Psychiatry). *B.A., Columbia, 1950; M.A., 1951; Ph.D., Cornell, 1955*

W. Allen Hauser (in Neurology) (in the Sergievsky Center). *B.A., Western Reserve, 1958; M.D., St. Louis, 1962*

Zena A. Stein (in the Sergievsky Center). *B.A., Cape Town, 1941; M.A., 1942; B.Ch., Witwatersrand (South Africa), 1950*

Mervyn W. Susser (Sergievsky Professor). *M.B.B.Ch., Witwatersrand, 1950*

Adjunct Professor

David Rush. *B.A., Harvard, 1955; M.D., 1959*

Associate Professor

Elmer Struening. *B.S., Hastings, 1949; M.S., Purdue, 1951; Ph.D., 1957*

Associate Professor of Clinical Public Health

Inge F. Goldstein. *B.A., Wellesley, 1951; M.S., Pittsburgh, 1956; M.S., Columbia, 1968; Dr.P.H., 1976*

Adjunct Associate Professors

Patricia R. Cohen. *B.A., Hamline, 1958; Ph.D., New York University, 1968*

Jennie K. Kline (in the Sergievsky Center). *B.A., Chicago, 1972; M.S., Columbia, 1974; M.Phil, 1975; Ph.D., 1977*

Holger H. Hansen. *M.D., Freie (Berlin), 1961; M.P.H., Columbia, 1967; Dr.P.H., 1973*

Adjunct Associate Clinical Professors

Elaine Millner. *B.S., Cornell, 1953; M.A., Kean, 1969; Dr.P.H., Columbia, 1975*

Cladd E. Stevens. *B.A., Pomona College, 1963; M.D., Baylor, 1968; M.P.H., Washington (Seattle), 1974*

Research Scientist

Lillian M. Belmont (in the Sergievsky Center). *B.A., Brooklyn, 1947; M.A., College of the City of New York, 1949; Ph.D., New York University, 1957; M.S., Columbia, 1970*

Assistant Professors

Anne T. Berg. *B.A., Cornell, 1979; M.P.H., Yale, 1982; Ph.D., 1986*

Trudy L. Bush. *B.S., Pennsylvania State, 1969; M.A., 1972; Ph.D., 1977; M.S., Johns Hopkins, 1980*

David L. Carmichael. *B.A., Harvard, 1969; M.D., Albert Einstein, 1976*

Leslie Davidson (also Pediatrics) (in the Sergievsky Center). *B.A., Harvard, 1969; M.D., Columbia, 1978*

Maureen C. Hatch. *B.A., Manhattan, 1963; M.P.H., Columbia, 1979; M.Phil, Ph.D., 1983*

Bruce G. Link. *B.A., Earlham, 1971; Ph.D., Columbia, 1980*

Alfred I. Neugut. *B.A., Columbia, 1972; M.D., Ph.D., 1977; M.P.H., 1983*

Ruth Ottman (in the Sergievsky Center). *B.A., California (Berkeley), 1975; Ph.D., 1980*

Nigel S. Paneth (also Pediatrics) (in the Sergievsky Center). *B.A., Columbia, 1968; M.D., Harvard, 1972; M.P.H., Columbia, 1978*

Steve Shea (in Medicine). *B.A., Harvard, 1968; M.A., Yale, 1971; M.D., Columbia, 1979*

Assistant Professors of Clinical Public Health

Mary Judith Murphy. *B.S., Mt. St. Vincent, 1965; M.S., Sarah Lawrence, 1974; M.D., New York Medical College, 1978*
John L. Kiely. *B.a., Dartmouth, 1974; M.A., New School for Social Research, 1976; Ph.D., Columbia, 1984*

Assistant Clinical Professors

Stephen Shafer (also Neurology) (in the Sergievsky Center). *B.A., Harvard, 1966; M.D., Columbia, 1970; M.P.H., 1977*
Sam R. Toussie. *B.A., Vermont, 1972; M.S., Columbia, 1976; Ph.D., 1984*

Adjunct Assistant Professors

Ann B. Goodman. *B.A., Radcliffe, 1953; M.A., George Washington, 1963; M.S., Columbia, 1972*
Gretchen Dieck. *B.A., Smith, 1976; M.Phil, Yale, 1979; Ph.D., 1982*
Alan R. Kristal. *B.A., Michigan, 1973; M.S., Framingham State, 1976; M.P.H., Northwestern, 1979; Dr.P.H., Columbia, 1984*
Paul S. May. *B.S., College of the City of New York, 1951; M.S., Syracuse, 1952; D.Sc., Philadelphia College of Pharmacy, 1955; M.P.H., Columbia, 1970*
Rickey Wilson. *B.A., Texas, 1968; M.S., Columbia, 1985; M.D., Texas, 1972*
Sten Vermund. *B.A., Stanford, 1974; M.D., Einstein, 1977; M.Sc., D.P.H., London School of Tropical Medicine, 1981*

Associate Research Scientist

Robert A. Lubin. *B.A., Rutgers, 1971; M.A., Vermont, 1974; Ph.D., Columbia, 1979*

SPECIAL LECTURER
Anna C. Gelman, M.P.H.

LECTURERS
Gertrud S. Berkowitz, Ph.D.
Stephen M. Friedman, M.D., M.P.H.

Geriatrics and Gerontology

Professor of Clinical Public Health

Barry J. Gurland (John Borne Professor) (Division Head). *M.B.Ch.B., Capetown, 1955*

Associate Professor of Clinical Public Health

Ruth Bennett (Sociology). *B.A., Brooklyn, 1955; Ph.D., Columbia, 1962*

Assistant Professor of Clinical Public Health

John Anthony Toner (in Psychiatry). *B.A., William Paterson, 1975; Ed.D., Columbia, 1976*

Health Administration

Professors

Howard L. Bailit (Division Head). *D.M.D., Tufts, 1962; M.S., Harvard, 1964; Ph.D., 1967*
Lowell E. Bellin. *B.S., Yale, 1948; M.D., State University of New York (Downstate), 1951; M.P.H., Harvard, 1964*
Lucie S. Kelly (also Nursing). *B.S.N., Pittsburgh, 1947; M.Litt., 1957; Ph.D., 1965*
Samuel Wolfe. *M.D., Toronto, 1950; M.P.H., Columbia, 1960; Dr.P.H., 1961*

Adjunct Professor

Joseph V. Terenzio. *B.A., Yale, 1939; J.D., Fordham, 1947; M.S., Columbia, 1954*

Clinical Professor

Arthur Manoharan (at Harlem Hospital). *M.B.B.S, Madras (India), 1951; Dr.P.H., Columbia, 1960*

Associate Professors

Bernard Challenor. *B.A., Hunter, 1957; M.D., State University of New York (Downstate), 1961; M.P.H., Harvard, 1963*
Jeanne M. Stellman. *B.S., City College, 1968; Ph.D., 1972*

Associate Professor of Clinical Public Health

Stephen N. Rosenberg. *B.A., Cornell, 1963; M.D., Albert Einstein, 1967; M.P.H., Harvard, 1969*

Adjunct Associate Professors

Noreen M. Clark. *B.S., Utah, 1965; M.A., Columbia, 1972; Ph.D., 1976*
Harold Fruchtbaum (History and Philosophy of Public Health). *B.C.E., New York University, 1955; M.S., Rensselaer Polytechnic Institute, 1956; Ph.D., Harvard, 1964*
Lloyd F. Novick. *B.A., Colgate, 1961; M.D., New York University, 1965; M.P.H., Yale, 1971*

Assistant Professors

Sheila A. Gorman. *B.S., R.N., Niagara, 1959; M.P.H., Columbia, 1972; Ph.D., 1982*
Kenneth E. Thorpe. *B.A., Michigan, 1978; M.A., Duke, 1980; Ph.D., Rand Graduate Institute, 1984*

Assistant Clinical Professors

Joseph Corcoran. *B.S., St. Peter's College, 1964; M.B.A., Pace, 1965*
Eugene M. Devine. *B.A., Union College, 1970; M.P.H., Pittsburgh, 1973*
David Lawrence Ginsberg. *B.Arch., Cornell, 1955*
Margaret L. Haynes. *B.S., Fairleigh Dickinson, 1968; M.P.H., Columbia, 1975; Ed.D., 1984*
Michael O'Connor. *B.A., St. John's, 1972; M.P.A., City University of New York, 1977*
Richard S. Thomas. *B.Arch., Pratt Institute, 1968*
Richard P. Zucker. *B.E., Cooper Union, 1970; M.P.H., Columbia, 1981*

Adjunct Assistant Professors

Donald L. Ashkenase. *B.S., Booklyn, 1965; M.B.A., Wagner, 1974*
John Baer. *B.A., Oberlin, 1959; M.S., Columbia, 1961; D.P.A., New York University, 1967*
Tryfon J. Beazoglou. *B.D., Athens, 1963; M.A., Chicago, 1972; Ph.D., Northwestern, 1980*
Robert Boyar. *B.Arch., Renssalaer Polytechnic Institute, 1957*
Arlene Bregman. *B.A., State University of New York (Albany), 1971; M.P.H., Columbia, 1975*
Willine Carr. *B.A., North Carolina (Greensboro), 1967; M.P.H., North Carolina (Chapel Hill), 1970; Dr.P.H., Columbia, 1982*
Annette Choolfain. *B.S., Bridgeport, 1964; M.P.A., New York University, 1972*
Merle C. Cunningham. *B.A., Rochester, 1976; M.D., Columbia, 1972; M.P.H., 1976*
Anita Stiles Curran. *B.A., Connecticut, 1951; M.D., New York Medical College, 1955; M.P.H., Columbia, 1974*
Stephen Forstenzer. *B.A., St. Laurence, 1957; M.S., Columbia, 1960*
Harriet S. Goldman (also Dental and Oral Surgery). *B.A., New York University, 1962; D.D.S., 1965; M.P.H., Columbia, 1966*

Gail Marie Gordon. *B.S., Minnesota, 1968; M.P.H., Johns Hopkins, 1973; Dr.P.H., Columbia, 1979*
Nancy Graham. *B.S., Columbia, 1956; M.A., New York University, 1960; M.P.H., Columbia, 1972; Dr. P.H., 1976*
William H. Hermann. *B.S., Missouri, 1951; M.S., Yale, 1953*
Nicholas Herskovits. *B.B.A., College of the City of New York, 1963*
Henry R. Karpe. *B.B.A., College of the City of New York, 1952; M.S., Wisconsin, 1972*
William David Latham. *B.S., Stanford, 1966; M.B.A., 1968*
P. Bertrand Phillips (Public Health Practice). *B.A., San Francisco State, 1954; M.A., 1956; Ed.D., Columbia, 1965*
Marcia L. Pinkett-Heller. *B.A., Howard, 1963; M.P.H., Michigan, 1970*
Joseph F. Pofit, Jr. (At Mary Imogene Bassett Hospital). *B.A., Northeastern, 1973; M.S., 1975; M.P.H., Columbia, 1977*
Arnold E. Rosenblum (Health Administration). *B.A., Brooklyn, 1947; J.D., New York University, 1950; M.S., Columbia, 1964*
Eleanore Rothenberg. *B.A., Brooklyn, 1955; M.P.A., New York University, 1969; Ph.D., 1975*
Sheila M. Smythe. *B.S., Creighton, 1952; M.S., Columbia, 1956*
Barry R. Snow. *B.A., Yeshiva, 1975; M.Phil., City University of New York, 1980; Ph.D., Columbia, 1981*
James R. Tallon, Jr. *B.A., Syracuse, 1963; M.A., Boston, 1967*
Michael L. Ziegler. *B.A., State University of New York (Albany), 1972; J.D., State University of New York (Buffalo), 1976*

LECTURERS
Kenneth Adamec, M.S.
George M. Adams, M.S.
Allan C. Anderson, M.S.
Richard Berman, M.B.A.
William Henry Brown, B.Arch.
Martin Cherkasky, M.D.
Thomas J. Craig, M.P.H.
Yehudi M. Felman, M.D.
Andrew C. Fleck, Jr., J.D.
Raymond Fleishman, M.S.
Thomas J. Foley, M.S.
Nicholas Freudenberg, Dr.P.H.
Bernard Fuss, M.S.
Gary Gambuti, M.P.H.
Margaret M. Griesmer, B.S.
Margaret T. Grossi, M.D.
Ruth Hasse, M.A.
Anne C. Hargreaves, M.S.
David Harris, M.D.
Cathy Idema, M.P.H.
Florence Kavaler, M.D.
Jacob J. Lindenthal, Ph.D.
Regina Loewenstein, M.A.
Vivian E. Lubin, M.P.H.
Elaine Lugovoy, M.A.
Robert Markowitz, M.S.
Lawrence E. McDevitt, B.A.
Mary C. McLaughlin, M.D.
Charles H. Meyer, M.S.
Penelope F. Murphy, M.S.
Anthony C. Mustalish, M.D.
Janet M. Nakushian, M.A.
Karl E. Nelson, M.S.

LECTURERS *(continued)*
Donna O'Hare, M.D.
Jean Pakter, M.D.
Clarence Pearson, M.S.
Peter Rogatz, M.D.
Edward J. Rosasco, Jr., M.B.A.
Alan H. Rosenblut, M.B.A.
Rachel Rotkovitch, M.S.
Harvey Schoenfeld, M.S.
Sherry Shamansky, Ph.D.
Alvin H. Strelnick, M.D.

INSTRUCTORS
Michael Goldfarb, M.S.
Joseph B. Stamm, M.P.H.

ASSOCIATES
Robert Malcolm Carr, M.B.A.
Michael S. Fassler, M.P.H.
Deborah E. Halper, M.P.H.
Anne B. Jacobs, M.S.
Ilise A. Zimmerman, M.P.H.

SPECIAL LECTURER
Gloria Dammann, M.P.H.

Population and Family Health

Professors

Stephen L. Isaacs. *B.A., Brown, 1961; J.D., Columbia, 1965*
John A. Ross. *B.A., Ottawa, 1956; M.A., Yale, 1957; Ph.D., 1961*
Giorgio R. Solimano. *B.S., Chile, 1952; M.D., 1960*
Joe D. Wray. *B.A., Stanford, 1947; M.D., 1952; M.P.H., North Carolina, 1967*

Clinical Professor

Martin E. Gorosh. *B.A., Brooklyn, 1959; M.P.H., Johns Hopkins, 1969; Dr.P.H., 1973*

Associate Professor

Andrew R. Davidson. *B.A., Sterling; M.A., Illinois, 1971; Ph.D., 1974*

Adjunct Associate Professors

Susan G. Philliber. *B.A., Florida State, 1965; M.S., 1966; Ph.D., 1968*
Joy G. Dryfoos. *B.A., Antioch, 1951; M.A., Sarah Lawrence, 1966*

Associate Professors of Clinical Public Health

Pearila Namerow. *B.A., Pennsylvania, 1970; M.Phil., Columbia, 1974; Ph.D., 1976*

Associate Clinical Professors

Rosemary Barber-Madden. *B.A., Jersey City State, 1968; M.S., Hunter, 1977; Ed.D., Temple, 1980*
Audrey Tittle Cross. *N.S., California (Berkeley), 1967; M.P.H., 1969; J.D., California (Hasting), 1978; Ph.D., California (Berkeley), 1985*
Judith E. Jones. *B.A., Hunter, 1956; M.S., Columbia, 1983*
William A. Van Wie. *B.A., Wooster, 1961; B.D., Pittsburgh Seminary, 1964; M.P.H., North Carolina, 1968; Dr.P.H., 1974*

Assistant Professors

Katherine F. Darabi. *B.A., Syracuse, 1969; M.S., Columbia, 1975; M.Phil., 1977; Ph.D., 1980*
Debra Kalmus. *B.A., State University of New York (Buffalo), 1973; M.S.W., Bryn Mawr, 1976; M.A., Michigan, 1977; Ph.D., 1980*
Ann M. Kimball. *B.S., Stanford, 1972; M.D., Washington, 1976; M.P.H., 1981*
Sally A. Lederman. *B.S., Brooklyn, 1957; M.S., Columbia, 1976; M.Phil., 1979; Ph.D., 1980*
Virginia A. Rauh. *B.A., Middlebury, 1969; M.S.W. Smith, 1971; Sc.D., Harvard, 1982*

Adjunct Assistant Professor

Catherine Cowell. *B.S., Hampton Institute, 1945; M.S., Connecticut, 1947*

Assistant Professors of Clinical Health

Rebecca J. Cook. *B.A., Columbia, 1970; M.A., Tufts, 1972; M.P.A., Harvard, 1973; J.D., Georgetown, 1982*
Norman L. Weatherby. *B.A., North Texas State, 1974; M.A., 1978; Ph.D., Florida State, 1983*

Adjunct Assistant Professor of Clinical Public Health

Michelle G. Shedlin. *B.S., Columbia, 1968; M.A., 1975; M.Phil., Ph.D., 1982*

Assistant Clinical Professors

Nancy E. Jones. *B.S.N., Columbia, 1969; M.P.H., 1975; Dr.P.H., 1986*
Susan Nalder. *B.S., Washington, 1965; M.P.H., Johns Hopkins, 1970*
Maria J. Wawer. *B.S., New Brunswick (Fredericton), 1974; M.D., McMaster (Hamilton, Ontario), 1977; M.H.Sc., Toronto, 1980*
Mark S. Rapaport. *B.A., M.D., Boston, 1970; M.P.H., Harvard, 1973*
Linda A. Randolph. *B.S., Howard, 1962; M.P.H., California (Berkeley), 1971*

Associate Research Scientists

James Allman. *B.A., Harvard, 1965; M.A., 1972; Ph.D., 1973*
Abdul Aziz Farah. *B.S., Khartoum, 1969; M.Phil., Cairo Demographic Centre, 1975; M.A., Pennsylvania, 1978; Ph.D., 1981*
Robert Futterman. *B.A., Brooklyn, 1975; M.A., Michigan, 1977; Ph.D., 1980*
Donald J. Lauro. *B.A., California (Berkeley), 1966; M.A., 1971; Ph.D., Australian National (Canberra), 1979*
Eugene M. Weiss. *B.A., California (Berkeley), 1963; M.P.H., 1965; Ph.D., Michigan, 1972*

LECTURERS
Nicholas Cunningham, M.D.
Jean Pakter, M.D.
Victor Penchaszadeh, M.D.

ADJUNCT LECTURER
Elizabeth Bernardik, Ph.D.

Sociomedical Sciences

Professors

Denise B. Kandel (in Psychiatry). *B.A., Bryn Mawr, 1952; M.A., Columbia, 1953; Ph.D., 1960*
Eugene Litwak (Division Head). *B.A., Wayne State, 1948; Ph.D., Columbia, 1958*
Emily Mumford (also Psychiatry). *M.A., Columbia, 1959; Ph.D., 1963*
Seymour Spilerman (Julian C. Levi Professor of Social Sciences). *B.A., Pomona, 1959; M.A., Brandeis, 1961; Ph.D., Johns Hopkins, 1968*

Clinical Professor

Joseph Marbach. *B.A., Drew, 1956; D.D.S., Pennsylvania, 1960*

Adjunct Professor

Muriel Hammer. *B.A., Ohio, 1947; M.A., Columbia, 1948; Ph.D., 1961*

Senior Research Scientist

Ann F. Brunswick. *B.A., Hunter, 1946; M.A., Clark, 1947; Ph.D., Columbia, 1976*

Associate Professors

Ruth G. Bennett. *B.A., Brooklyn, 1955; Ph.D., Columbia, 1962*
John L. Colombotos. *B.A., Columbia, 1949; M.A., 1952; Ph.D., Michigan, 1961*

Associate Clinical Professor

Carol Caton. *B.S., Columbia, 1962; M.S.N., Yale, 1965; Ph.D., Michigan, 1961*

Research Scientist

Mata K. Nikias. *D.D.S., Athens, 1953; M.P.H., Columbia, 1960; Ph.D., 1976*

Assistant Professors

Mary Elizabeth Crandon (Anthropology). *B.A., Elmira, 1971; M.A., Massachusetts, 1973; Ph.D., 1980*
Peter A. Messeri. *B.S., Massachusetts Institute of Technology, 1972; M.A., Columbia, 1976; Ph.D., 1985*

Adjunct Assistant Professors

Judith Barr. *B.A., Goucher, 1957; Sc.D., Johns Hopkins, 1976*
Margery Braren. *M.A., Columbia, 1963; Ph.D., 1971*
Sally Guttmacher. *B.S., Wisconsin, 1963; Ph.D., Columbia, 1976*
Lawrence Krasnoff. *B.A., College of the City of New York 1969; Ph.D., 1979; M.S., Columbia, 1981*
Debra Murphy. *B.S., New Mexico, 1975; M.S., Texas Christian, 1981; Ph.D., 1983*
Matthew A. Rosen. *B.A., Columbia, 1967; M.A., 1969; M.Phil., 1975; Ph.D., 1979*

Associate Research Scientists

Stanley Fisher. *B.S., College of the City of New York, 1949; M.S.W., Columbia, 1955; Ph.D., City University of New York, 1977*
Mary Clare Lennon. *B.A., Fordham, 1970; M.A., Columbia, 1975; Ph.D., 1980; M.S., 1985*
John L. Martin. *B.A., California, 1974; Ph.D., City University of New York, 1982; M.P.H., Columbia, 1984*
Barbara S. Mensch. *B.A., Wellesley, 1976; M.A., Princeton, 1981; M.A., Cambridge, 1982; Ph.D., Princeton, 1983*
Victoria H. Raveis. *B.A., Connecticut, 1972; M.A., Boston College, 1974; M.Phil., Columbia, 1978; Ph.D., 1984*
Carmen Velez-Santori. *B.A., Puerto Rico, 1970; M.A., 1973; M.Phil., Columbia, 1978; Ph.D., 1981*
Carole S. Vance. *B.A., Hunter, 1968; Ph.D., Columbia, 1970*

Senior Research Associate

Paul S. Haberman. *B.S., Pennsylvania, 1948; M.B.A., New York University, 1961*

SPECIAL LECTURER
Jack Elinson, Ph.D.

Research Associate

Athilia Siegmann. *B.S., Queens, 1944; M.A., Columbia, 1947*

INSTRUCTORS
Donald H. Gemson, Ph.D., M.P.H.
Andrew J. Gordon, Ph.D., M.P.H.
Rochelle Kern, Ph.D., M.P.H.

LECTURERS
Raymond Fink, Ph.D.
Eric Josephson, Ph.D.
Corinne Kirchner, M.Phil.
Susanne G. Rinaldo, Ph.D.
Lucille Rosenbluth, M.P.A.

ASSOCIATE
Betty W. Levin, Ph.D.

Tropical Medicine

Professors

Dickson D. Despommier (Parasitology) (also Microbiology). *B.S., Fairleigh Dickinson, 1962; M.S., Columbia, 1964; Ph.D., Notre Dame, 1967*
Michael Katz (also Pediatrics). *B.A., Pennsylvania, 1949; M.D., State University of New York (Downstate), 1956; M.S., Columbia, 1963*

Associate Professor

Philip A. D'Alesandro (Acting Division Head) (Parasitology) (also Microbiology). *B.S., Rutgers, 1952; M.S., 1954; Ph.D., Chicago, 1958*

Adjunct Associate Professor

John D. Frame. *B.A., Wheaton, 1938; M.D., Northwestern, 1943*

Assistant Professor

M. Susanne Holmes Giannini (Parasitology) (also Microbiology). *B.A., New York University, 1966; Ph.D., Rutgers, 1974*

Assistant Clinical Professor

Martin G. Blechman. *B.S., George Washington, 1949; M.S., Columbia, 1953; M.D., Jefferson, 1957*

Faculty Members Not Affiliated With Specific Divisions

Professor

Robert J. Weiss (Dean Emeritus and DeLamar Professor Emeritus of Public Health, Social Medicine and Psychiatry). *B.A., George Washington, 1947; M.D., Columbia, 1951*

Associate Professors

Sami A. Hashim (Public Health Nutrition). *B.S., Beirut, 1950; M.N.S., 1948; Ph.D., Harvard, 1955*
Stephen Wotman. *D.D.S., Pennsylvania, 1956*

Radiation Oncology

Professor and Chairman

James D. Cox. *B.A., Kenyon, 1960; M.D., Rochester, 1965*

At Presbyterian Hospital

Professors

Chu Huai Chang. *M.D., St. John's (Shanghai), 1944*
Eric J. Hall (Physics). *D.Phil, Oxford, 1962; D.Sc., 1978*
Harald Rossi (Physics). *Ph.D., Johns Hopkins, 1942*

Adjunct Professor

Victor P. Bond (Radiation Biophysics). *B.A., California (Berkeley), 1943; M.D., California (San Francisco), 1945; Ph.D., California (Berkeley), 1952*

Associate Professors

Charles R. Geard (Radiation Biophysics). *B.A.S., Melbourne, 1960; M.Sc., Tasmania, 1969; Ph.D., Australian National, 1973*
Ritsuko Komaki

Associate Clinical Professor

Karen S. Fountain. *B.A., Northern State (South Dakota); M.D., Maryland, 1972*

Research Scientist

Marco Zaider (Radiation Biophysics). *M.S., Bucharest, 1968; Ph.D., Tel Aviv, 1976*

Assistant Professors

Myles Barry Astor. *B.A., Columbia, 1976; M.A., 1981; M.Phil., 1982*
David Janathan Brenner. *B.A., Oxford, 1974; M.Sc., London, 1976; Ph.D., Surrey, 1979*
Howard B. Lieberman. *B.S., Brooklyn, 1977; Ph.D., Rutgers, 1982*
Arthur Liskow. *B.S., Cincinnati, 1963; M.D., 1967*
Michael J. Marchese. *B.A., New York University, 1976; M.D., Baylor, 1979*
Richard Cavin Miller. *B.A., Iowa, 1969; M.S., 1972; Ph.D., 1976*

Assistant Professor of Clinical Radiation Oncology

Mary K. Martel. *B.S., Illinois Benedictive College, 1978; M.A., Clark, 1980; Ph.D., 1982*

Associate Research Scientists

Richard P. Bird (Radiation Biophysics). *B.S., Colorado, 1960; M.S., 1962; Ph.D., California (Berkeley), 1972*
Paul E. Goldhagen (Radiation Biophysics). *B.S., Maryland, 1967; Ph.D., Princeton, 1973*
Tom K. Hei. *B.Sc., Wisconsin, 1958; Ph.D., New York University, 1974*
Paul J. Kliauga (Radiation Biophysics). *B.S., Chicago, 1958; Ph.D., New York University, 1974*
Gerhard Randers-Pehrson. *B.S., Rensselaer Polytechnic, 1966; M.D., Maryland, 1979*
Jaime S. Rubin. *Ph.D., Toronto, 1984*

Radiology

James Picker Professor and Chairman

David H. Baker. *M.D., Boston, 1951*

At Presbyterian Hospital

Professors

Philip O. Alderson. *B.A., Washington (St. Louis), 1966; M.D., 1970*
Walter E. Berdon. *B.A., Syracuse, 1950; M.D., 1955*
Kent Ellis. *M.D., Yale, 1950*
Sadek Hilal. *M.D., Cairo, 1955*

Professors of Clinical Radiology

Rashid Fawwaz. *M.D., American (Beirut), 1960; Ph.D., California (Berkeley), 1968*
Frieda Feldman. *B.A., New York University, 1953; M.D., 1957*
Donald L. King. *B.A., Stanford, 1956; M.D., Columbia, 1960*
Eric C. Martin. *B.A., Oxford, 1963; M.A., 1967; M.D., St. Thomas (London), 1967*
Ralph Schlaeger. *B.S., Wisconsin, 1942; M.D., 1945*

Associate Professor

Jeffrey H. Newhouse. *B.A., Princeton, 1963; M.D., Harvard, 1967*

Associate Professors of Clinical Radiology

Thane Asch. *B.A., Columbia, 1951; M.D., Cornell, 1955*
John H. Austin. *B.A., Harvard, 1961; M.D., Yale, 1965*
Peter D. Esser (Radiation Biophysics). *B.A., Brown, 1961; M.S., Adelphi, 1964; Ph.D., 1971*
Monique C. Katz. *B.A., Vassar, 1959; M.D., Albert Einstein, 1963*
Edward L. Nickoloff (Radiation Physics). *B.S., Carnegie Institute of Technology, 1965; M.S., New Hampshire, 1968; Sc.D., Johns Hopkins, 1977*
Alan J. Silver. *B.A., Harvard, 1967; M.D., Rochester, 1973*
Theodore Sheng-Tao Wang. *B.S., National Mukden Medical College (China), 1952; M.S., Nebraska, 1958; Ph.D., Maryland, 1964*

Associate Clinical Professors

Sundara R. Ganti. *M.B.B.S., Guntur Medical College (India), 1967; M.D., 1967*
Kevin L. Macken. *M.D., National (Ireland), 1947*
Robert Silbey. *B.A., Columbia, 1952; M.D., 1955*

Assistant Professors

John B. Amodio. *B.A., New York University, 1976; M.D., New York Medical College, 1980*
Jacqueline Bello. *B.A., Dartmouth, 1976; M.D., Columbia, 1980*
Kaaren N. Bergquist. *B.S., Wisconsin State, 1962; M.D., Case Western Reserve, 1968*
Ronda Bixon. *B.S., Tufts, 1976; M.D., 1981*
Agnes M. Boxhill. *B.S., City College of New York, 1974; M.D., Columbia, 1979*
David Jonathan Brenner. *B.A., Oxford, 1974; M.Sc., London, 1976; Ph.D., Surrey, 1979*
Susan Frank. *B.A., Pennsylvania, 1972; M.D., Columbia, 1977*
Alvin B. Galuten. *B.A., Rutgers, 1977; M.D., Emory, 1981*
David C. Grant. *M.D., Case Western Reserve, 1975*
Alexander G. Khandji. *B.S., St. Francis, 1975; M.D., State University of New York (Downstate), 1980*
Karen Laffey. *B.A., Bryn Mawr, 1968; M.Phil., Yale, 1971; Ph.D., 1974; M.D., 1977*
Michel E. Mawad. *M.D., French University (Beirut), 1976*
Franklin G. Moser. *B.S., Yale, 1977; M.D., McGill, 1981*
Elizabeth W. O'Connell. *B.A., New York University, 1973; M.D., New York Medical College, 1976*
Ahalya Premkumar. *M.D., Bombay, 1977*
Benjamin Mayer Romney. *M.D., Columbia, 1972*
Joel M. Rosen. *B.S., Brooklyn, 1971; M.D., Cornell, 1975; M.S., Pennsylvania, 1977*
Jonathan Isaac Rubin. *B.A., Boston, 1977; M.D., 1981*
John Neal Rutledge. *B.S., Oklahoma, 1976; M.D., 1980*
David W. Seldin. *B.S., Massachusetts Institute of Technology, 1968; M.S., Colorado, 1970; M.D., New York University, 1975*
Rolando D. Singson. *B.S., Santo Tomas (Philippines), 1965; M.D., 1970*
Laurie Roizin Towle. *B.S., Marymount, 1967; M.S., New York University, 1971*

Assistant Professors of Clinical Radiology

Sarah Abramson. *B.A., Sarah Lawrence, 1967; M.D., Mt. Sinai, 1971*
Andrew DeRogatis. *B.A., Seton Hall, 1971; M.S., Rutgers, 1973; M.D., 1975*
Thomas Lowinger. *B.S., Brooklyn, 1970; M.A., Columbia, 1972; Ph.D., State University of New York (Downstate), 1981*
Herman W. Lubetsky. *B.S., College of the City of New York, 1948; M.D., Geneva, 1953*
Andrew Arthur Maudsley. *B.S.C., Nottingham, 1973; Ph.D., 1976*
In Ki Mun. *B.A., Pomona, 1975; M.S., Cornell, 1978; Ph.D., 1980*
Jonathan Isaac Rubin. *B.A., Boston, 1977; M.D., 1981*
Ellen F. Silverstein. *B.A., Brandeis, 1962; M.A., Columbia, 1963; M.D., State University of New York (Downstate), 1969*
Sheng-Tao Wang. *Ph.D., Maryland, 1964*

Adjunct Assistant Professor

Bruce J. Biavati (Radiation Biophysics). *B.A., Columbia, 1953; M.A., 1955; Ph.D., 1964*

Assistant Clinical Professors

Harry Agress, Jr. *B.A., Tufts, 1968; M.D., 1972*
Gregory Marc Carsen. *B.A., Oberlin, 1965; M.D., State University of New York (Downstate), 1969*
Susan Judith Frank. *B.A., Pennsylvania, 1972; M.D., Columbia, 1977*
William M. Griffin. *B.S., Notre Dame, 1958; M.D., State University of New York (Upstate), 1962*
Harvey L. Hecht. *B.A., Amherst, 1958; M.D., Albert Einstein, 1962*

Associate Research Scientists

Jong-Beom Ra. *Ph.D., Advanced Institute of Science Technology (Korea), 1983*
Laurie Roizin Towle. *B.S., Marymount, 1967; M.S., New York University, 1971*
Peter M. S. Wai. *B.A., Augustana, 1970; M.S., Columbia, 1973; D.Eng.Sci., 1977*

SPECIAL LECTURER
William B. Seaman, M.D.

INSTRUCTORS IN CLINICAL RADIOLOGY
James V. Atherton, M.D.
Steven J. Bier, M.D.
Barbara Binkert, M.D.
Neil M. Borden, M.D.
T. Linda Chi, M.D.

INSTRUCTORS *(continued)*
Bruce J. Derauf, M.D.
Asim Gulteken Dikengil
Francis J. Fernandez, Jr., M.D.
Alfred G. Gladstone, M.D.
Robert Michael Jaffa, M.D.
John M. Maher, M.D.
Liana R. Medina-Pizarro, M.D.
Joseph K. Rogers, M.D.
Ronald Bernard Staron, M.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professors

Lawrence Barnowsky. *B.A., Hofstra, 1972; M.S., Rutgers, 1974; M.D., Albany Medical College, 1978*
Vittal B. Chanamolu. *M.D., Kakatiya Medical College (India), 1972*
Rajendrakumar Dalal. *M.B.B.S., Doctor V.M. Medical School (India), 1969*
Harry Rodman Hartman. *M.D., Yale, 1959*
Katherine Lloyd. *B.A., Radcliffe, 1970; M.D., Rochester, 1975*
Abadurrahman Unal. *M.D., Hacettepe (Turkey), 1974*
Peter T. Wright. *B.A., Albion (Michigan), 1971; M.D., Michigan, 1975*

Adjunct Assistant Professor

Stephen W. Nagy. *Ph.D., Connecticut, 1959*

At Harlem Hospital

Associate Clinical Professor

Theodore R. Stent. *B.A., Talladega, 1944; M.D., Meharry, 1948*

Assistant Clinical Professors

Norma M. Aquino. *M.D., Santo Tomas(Philippines), 1964*
Alice N. Francisco. *A.A., Santo Tomas (Philippines), 1956; M.D., 1961*
Christopher A. Johnson. *B.A., Howard, 1943; M.D., 1947*
Yuthana Samroengraja. *M.D., Chulongkorn Hospital Medical School, 1965*
Abdulhamid R. Vazir. *M.D., Bombay, 1942*

INSTRUCTORS IN CLINICAL RADIOLOGY
Nabil Arslan, M.D.
Serge Balmir, M.D.
Apichai Jarenwattananon, M.D.

At Morristown Memorial Hospital

Assistant Professor of Clinical Radiology

David L. Bloom. *B.A., Harvard, 1951; M.D., Tufts, 1955*

At St. Luke's–Roosevelt Hospital Center

Professor

Ronald C. Ablow. *B.A., Harvard, 1954; M.B.A., 1956; M.D., Rochester, 1962*

Professor of Clinical Radiology

Guy D. Potter. *M.D., Chicago, 1956; B.Sc., 1957*

Clinical Professors

Kuo-York Chynn. *B.S., National Tung-Chi (Shanghai), 1945; M.D., 1949; M.S., St. Louis, 1954*
Virginia Kanick. *B.A., Barnard, 1947; M.D., Columbia, 1951*

Associate Professor

Souheil Saddekni. *M.D., Damascus (Syria), 1972*

Associate Clinical Professors

Jeanne W. Baer. *B.S., Connecticut, 1960; M.D., Columbia, 1964*
John T. Hsu. *M.D., National Defense (Taiwan), 1957*
Leonard M. Liegner. *B.A., New York University, 1941; M.D., 1944*
Efthimios C. Spyropoulos. *M.D., Athens, 1948*

Assistant Professors

Karen T. Brown. *M.D., Boston, 1979*
Richard P. Gold. *B.A., Tufts, 1965; M.D., 1969*
Mark R. Goldberg. *B.S., Hunter, 1976; M.D., State University of New York (Downstate), 1981*

Susan Hilton. *M.D., Medical College of Pennsylvania, 1975*
Richard M. Schaffer. *M.D., State University of New York (Downstate), 1976*

Assistant Professors of Clinical Radiology

Benjamin Bashist. *B.S., Brooklyn, 1972; M.D., Albert Einstein, 1975*
Andrew J. DeRogatis. *M.D., Rutgers, 1975*
Carol L. Hilfer. *B.A., Barnard, 1967; M.D., Albert Einstein, 1971*
Anita G. Moallem. *B.S., Brooklyn, 1960; M.D., Albert Einstein, 1964*
William I. Shaw. *B.A., Washington and Jefferson, 1958; M.D., Pittsburgh, 1962*
Alvaro Vallejo. *M.D., Del Valle (Colombia), 1967*

Assistant Clinical Professors

Michael Abiri. *M.D., Tehran, 1972*
Ina A. Altman. *B.S., Brooklyn, 1956; M.D., Woman's Medical College of Pennsylvania, 1960*
David S. Marsden. *Ph.D., Jefferson, 1968*
Theodora Serban. *B.S., Lyceum Regina Maria (Bucharest), 1947; M.D., Medical School (Bucharest), 1953*

INSTRUCTORS IN CLINICAL RADIOLOGY
Madhuri Kirpekar, M.D.
Alan Lubitz, M.D.
Ok Son-Yong, M.D.

Rehabilitation Medicine

Simon Baruch Professor and Chairman

John A. Downey. *M.D., Manitoba, 1954; D.Phil., Christ Church (Oxford), 1962; F.R.C.P.(C.)*

Professors of Clinical Rehabilitation Medicine

Edwin G. Gonzalez. *B.A., Santo Tomas (Philippines), 1962; M.D., 1967*
Stanley J. Myers. *B.A., New York University, 1957; M.D., State University of New York (Downstate), 1961*

Associate Professor

Lucien J. Cote (also Neurology). *B.A., Vermont, 1951; M.D., 1954*

Associate Clinical Professor

Sanders W. Davis. *M.D., Texas, 1965*

Assistant Professors of Clinical Rehabilitation Medicine

Anne Breuer. *B.S., Rensellaer, 1973; M.D., Albany, 1978*
Michael Hajdu. *M.D., Semmelweiss (Budapest), 1978*
Anthony J. Pisciotta. *B.A., Hofstra, 1971; M.D., Rome, 1980*

Assistant Clinical Professors

Cayetano C. Co. *M.D., Santo Thomas (Manila), 1954*
Antonio Cocchiarella. *M.D., Bari (Italy), 1953*
Francis J. Foca. *B.S., Fordham, 1957; M.D., Bologna (Italy), 1966*
Carolina O. McCagg. *B.A., Barnard, 1962; M.D., Yale, 1966*
Jonathan R. Moldover. *B.A., Trinity (Connecticut), 1970; M.D., Columbia, 1974*

Damyanti G. Moorjani (also Pediatrics). *B.S., Bombay, 1953; M.D., Grant (Bombay), 1957*
Anthony P. Porcelli. *B.A., Columbia, 1951; M.D., Boston, 1955*
Naomi L. Turner. *B.A., San Francisco Xavier (Bolivia), 1948; M.D., 1956*

Associate Research Scientists

Fredi Kronenberg. *B.S., Cornell, 1972; Ph.D., Stanford, 1979*
Daniel Eugene Lemons. *B.A., Goshen, 1974; M.S., Portland State (Oregon), 1978*

ASSOCIATES IN CLINICAL REHABILITATION MEDICINE
Alfred Hess, D.O.
John Joseph Kraus, M.D.
Howard Liss, M.D.
Robert Stone, M.S.
(at Blythedale Children's Hospital)

INSTRUCTORS IN CLINICAL REHABILITATION MEDICINE
Michael Canale, M.D.
Glenn F. Hutnick, A.A.
Donald Liss, M.D.
Robert J. Mitchell
Paul Ribera, B.S.
Patricia A. Richards (Blythedale), M.D.

At Harlem Hospital

Professor of Clinical Rehabilitation Medicine

Albert D. Anderson (A. David Gurewitsch Professor). *B.A., Columbia, 1948; M.D., Harvard, 1952*

Professor of Clinical Rehabilitation Medicine

Herbert L. Thornhill. *B.S., Pittsburgh, 1951; M.D., Howard, 1955*

Clinical Professor

Yasoma B. Challenor. *B.A., Hunter, 1959; M.D., State University of New York (Downstate), 1963*

Associate Clinical Professor

Wanda Brodzka. *M.D., Academy of Medicine (Warsaw), 1954*

SPECIAL LECTURER
Ivan T. Donev, M.D.

ASSOCIATES IN CLINICAL REHABILITATION MEDICINE
Thomas Abraham, M.D.
Iluminado C. Nebab, M.B.B.S.

INSTRUCTORS IN CLINICAL PHYSICAL THERAPY
Armand Demosthenes, M.D.
Joseph A. Malloy, M.D.
Harriet Minor, M.A.
Sandhya E. Zarapkar

At Helen Hayes Hospital

Assistant Professor of Clinical Rehabilitation Medicine

Arun Kuman Bhattacharyyan. *Intermediate Sci., Bangabasi (Calcutta), 1950; M.D., Nilratan Sirca Medical College (Calcutta), 1955*

ASSOCIATES IN CLINICAL REHABILITATION MEDICINE
Raj Mathews, M.D.
Marianna Thomas, M.B.B.S.

INSTRUCTOR IN CLINICAL PHYSICAL THERAPY
Barbara D. Hanley, M.S.

At St. Luke's–Roosevelt Hospital Center

Associate Clinical Professor

Patrick J. Fazzari. *B.S., Manhattan, 1963; M.D., Albany Medical College, 1967*

Assistant Clinical Professor

Lucille T. Pai. *M.D., Woman's Christian Medical College (Shanghai), 1941*

ASSOCIATE IN CLINICAL REHABILITATION MEDICINE
Ravi Raj Malpe, M.B., B.S.

Occupational Therapy

Associate Professor

Barbara Neuhaus (Director of Program). *B.A., Keuka, 1950; O.T.R., Columbia, 1952; M.A., Columbia, 1960; Ed.D., 1980*

Assistant Professor

Schone Pang. *M.S., Boston, 1978*

Assistant Professors of Clinical Occupational Therapy

Simme Cynkin. *B.S., Pennsylvania, 1965; M.S., 1970*
Janet Falk-Kessler. *B.S., Pennsylvania, 1974; M.A., Columbia, 1978*
Adele C. Germaine. *B.A., Connecticut College, 1969; M.S., O.T.R., Columbia, 1970*
Patricia A. Miller. *M.A., Columbia, 1978*
Gordon Williamson

ASSOCIATE IN CLINICAL OCCUPATIONAL THERAPY
Margaret Ann Brown, M.A.

INSTRUCTORS IN CLINICAL OCCUPATIONAL THERAPY
Gerard De Mauro, M.S.
Frances B. Kraver, B.S.
Pamela Miller

Physical Therapy

Associate Professors

Ruth Dickinson (Director of Program). *B.S., Russell Sage, 1944; M.A., Columbia, 1947*
Althea M. Jones. *B.S., Panzer College of Physical Education, 1944; M.A., Columbia, 1972*

Associate Professor of Clinical Physical Therapy

Bernadette Hecox. *B.S., Columbia, 1968; M.A., 1973*

Assistant Professors

Thomas J. Schmitz. *B.S., State University of New York (Buffalo), 1972; M.S., Boston, 1974*
Bonnie Teschendorf. *B.S., New York University, 1965; M.S., New School for Social Research, 1981*

Assistant Professor of Clinical Physical Therapy

Mary Joan Day. *B.S., St. Louis, 1961; M.S., Pennsylvania, 1972*

ASSOCIATES IN CLINICAL PHYSICAL THERAPY
Theodore Corbitt, M.A.
Patricia Sullivan, M.A.

INSTRUCTORS IN CLINICAL PHYSICAL THERAPY
Margaret Beyda, B.S.
Susan Connors, M.S.
Georgia Reidel, B.S.

Surgery

Valentine Mott Professor, Johnson and Johnson Distinguished Professor and Chairman

Keith Reemtsma. *B.S., Idaho State, 1945; M.D., Pennsylvania, 1949*

At Presbyterian Hospital

Professors

R. Peter Altman (Schullinger Professor of Pediatric Surgery) (also Pediatrics). *B.A., Colgate, 1955; M.S., Rochester, 1958; M.D., New York Medical College, 1961*
Frank Gump. *B.A., Harvard, 1951; M.D., New York University, 1955*
David V. Habif (Morris and Rose Milstein Professor). *B.S., Columbia, 1936; M.D., 1939*
Mark A. Hardy. *B.A., Columbia, 1958; M.D., Albert Einstein, 1962*
Frederic P. Herter (Hugh Auchincloss Professor). *B.A., Harvard, 1941; M.D., 1944*
Norman E. Hugo. *B.A., Williams, 1955; M.D., Cornell, 1959*
Thomas C. King (Jose Ferrer Professor). *B.A., Utah, 1950; M.D., 1954; M.A., Missouri, 1963*
John M. Kinney (and in the Institute for Human Nutrition). *B.A., Denison, 1943; M.D., Harvard, 1946*
John B. Price, Jr. *M.A., Texas, 1948; M.D., Johns Hopkins, 1950*

Professor of Clinical Pathology

Nicole Suciu-Foca. *B.S., Bucharest (Rumania), 1954; M.S., 1960; Ph.D., 1965*

Professors of Clinical Surgery

Frederick O. Bowman, Jr. *B.A., North Carolina, 1948; M.D., Pennsylvania, 1952*
Kenneth A. Forde. *B.S., City College of New York, 1954; M.D., Columbia, 1959*
James R. Malm. *B.A., Princeton, 1949; M.D., Columbia, 1956*
Alfred M. Markowitz. *B.A., New York University, 1948; M.D., Washington (St. Louis), 1952*

Clinical Professor

Bashir Ahmad Zikria. *B.S., George Washington, 1954; M.D., Johns Hopkins, 1958*

Associate Professors

Henry M. Spotnitz. *B.A., Harvard, 1962; M.D., Columbia, 1966*
Paul Lo Gerfo. *B.S., Rennsselaer Polytechnic Institute, 1961; M.S., 1963; M.D., State University of New York (Upstate), 1967*

Associate Professors of Clinical Surgery

Joseph A. Buda. *B.A., Columbia, 1951; M.D., Cornell, 1955*
Ivo P. Janecka. *M.D., Charles (Prague), 1965*
Alfred Jaretzki III. *B.A., Harvard, 1941; M.D., 1944*
Francis C. Symonds, Jr. *B.A., Princeton, 1947; M.D., Columbia, 1951*

Associate Clinical Professors

Robert G. Bertsch. *B.A., Carleton, 1953; M.D., Columbia, 1957*
David Bregman. *B.A., New York University, 1961; M.D., State University of New York (Downstate), 1965*
David M. Ju. *M.D., National Medical College (Shanghai), 1944; Med.Sc.D., Columbia, 1954*
Sven Kister. *B.A., Dartmouth, 1955; M.D., Harvard, 1958*
George C. Peck. *B.A., Johns Hopkins, 1949; M.D., Maryland, 1953*
John N. Schullinger. *B.A., Princeton, 1951; M.D., Columbia, 1955*

Research Scientist of Biochemistry

David Elwyn. *B.A., Columbia, 1941; Ph.D., 1950*

Assistant Professors

Alan Benvenisty. *B.S., Union, 1974; M.D., Columbia, 1978*
Alison Estabrook. *B.A., Barnard, 1974; M.D., New York University, 1978*
Roman Nowygrod. *B.A., Harvard, 1966; M.D., Columbia, 1970*
Eric A. Rose. *B.A., Columbia, 1971; M.D., 1975*
Steven Todd Ruby. *B.A., Brandeis, 1974; M.D., Columbia, 1978*
Craig Richey Smith. *B.A., Williams, 1970; M.D., Case Western Reserve, 1977*
Charles J. H. Stoler. *B.A., Washington (St. Louis), 1970; M.D., Georgetown, 1974*
George J. Todd. *B.S., Iona, 1970; M.D., Pennslyvania State, 1974*
Michael Treat. *B.A., Pennsylvania, 1971; M.D., Jefferson, 1976*
Collin J. Weber. *B.A., Princeton, 1967; M.D., Columbia, 1955*

Assistant Clinical Professors

Paul H. Gerst. *B.A., Columbia, 1948; M.D., 1952*
Leif O. Holgersen. *B.A., Taylor, 1960; M.D., New Jersey College of Medicine and Dentistry, 1965*
Peter S. Liebert. *M.D., Harvard, 1962*

Associate Research Scientists

Robert James Foster. *B.E., Cooper Union, 1973; M.S., Columbia, 1974; Sc.D., 1982*
Shanta M. Modak. *Ph.D., Haffkine Institute (Bombay), 1969*
Shrishailam S. Yemul. *B.S.C., Shivaji (Khapur, India), 1965; M.S.C., 1968; Ph.D., National Chemical Laboratory (Poona, India), 1974*

SPECIAL LECTURERS
Harold G. Barker, M.D.
Carl R. Feind, M.D.
Arthur B. Voorhees, M.D.
Philip Wiedel, M.D.

LECTURERS
Shivaji B. Bhonslay, M.D.
George Escher, M.D.

INSTRUCTORS IN CLINICAL SURGERY
Vincent W. Ansanelli, M.D.
Robert G. Blabey, M.D.
Harold M. Bruck, M.D.
Sherman M. Bull, M.D.
Leslie Mark Kutcher, M.D.
Mark David Sherman, M.D.
Charles A. Slanetz, M.D.
Michael Stalnecker, M.D.
James S. Todd, M.D.

At Mary Imogene Bassett Hospital

Professor of Clinical Surgery

David A. Blumenstock. *B.A., Union (Schenectady), 1949; M.D., Cornell, 1953*

Clinical Professor

John E. Olson (in Urology). *B.A., Kansas, 1953; M.D., 1956*

Associate Clinical Professor

Rodman D. Carter (in Urology). *B.A., Harvard, 1950; M.D., Columbia, 1954*

Assistant Professors of Clinical Surgery

James Bordley IV. *B.A., Yale, 1965; M.D., Columbia, 1970*
Patrick Allen Dietz. *B.A., Holy Cross, 1966; B.M.Sci., Dartmouth, 1968; M.D., Harvard, 1970*
Roger W. MacMillan III. *B.S., Trinity, 1961; M.D., Columbia, 1965*

Assistant Clinical Professor

Webster J. Stayman. *B.S., St. Lawrence, 1966; M.D., Jefferson, 1970*

At Harlem Hospital

Associate Professor of Clinical Surgery

Barbara Barlow. *B.A., New York University, 1946; D.D.S., Columbia, 1950; M.D., 1953*
Harold P. Freeman. *B.A., Catholic, 1954; M.D., Howard, 1958*

Associate Clinical Professors

David M. Carberry. *Ph.D., Providence, 1947; M.D., Jefferson, 1951*
John W. Parker, Jr. *B.A., Fisk, 1942; M.D., Meharry, 1945*
Mohamad H. Parsa. *B.S., Tehran, 1957; M.D., 1963*

Assistant Professors of Clinical Surgery

Ganepola A. Ganepola. *B.S., Kyoto, 1966; M.D., 1967*
Ferdinand A. Ofodile. *B.S., Northwestern, 1964; M.D., 1968*

Assistant Professor of Clinical Orthopedic Surgery

Shearwood J. McClelland. *B.A., Princeton, 1969; M.D., Columbia, 1974*

Assistant Clinical Professors

Rajunder P. Gandhi. *M.B.B.S., Institute of Medicine (Mandalay), 1966*
James E. C. Norris. *B.A., Hampton Institute, 1953; M.D., Case Western Reserve, 1967*
Ruben Oropeza. *B.S., Mexico, 1948; M.D., 1955*
Carlton E. Patrick. *M.D., University of the Saar (Hamburg, Germany), 1957*

Assistant Clinical Professor of Neurological Surgery

Robert W. Shick. *B.A., Columbia, 1948; M.D., New York Medical College, 1952*

ASSOCIATES IN CLINICAL SURGERY
Matthew D. Branche, M.D.
Urbano K. Guarin, M.D.
Malcolm Moley, M.D.
Pierre G. Van Bockstaele, M.D.

INSTRUCTORS IN CLINICAL SURGERY
Monqidh M. Al-Sawwaf, M.D.
Deodatta V. Bendre, M.D.
Egel Francois, M.D.
Edoardo Giuliani, M.D.
Robert W. Holtzman, M.D.
Avta S. Josen, M.D.
Sitaram Pillarisetty, M.D.
Barnett Miller, M.D.
Max Yergan, M.D.

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY
Jacqueline Emmanuel, M.D.
William L. King, Jr., M.D.
Caleb Medley, M.D.

INSTRUCTOR IN CLINICAL OTOLARYNGOLOGY
Cecil D. Grimes, M.D.

INSTRUCTOR IN CLINICAL PEDIATRIC SURGERY
Maria Niemirska, M.D.

INSTRUCTOR IN CLINICAL PLASTIC SURGERY
Janet P. Parler, M.D.

INSTRUCTOR IN CLINICAL UROLOGY
Saeid Shamsian, M.D.

At Morristown Memorial Hospital

Associate Clinical Professor of Surgery

Ames L. Filipone. *B.A., Cornell, 1950; M.D., 1953*

Assistant Clinical Professors

John Alkhas. *M.D., Tehran, 1959*
Rolf Bessin. *M.D., George Washington, 1964*
John Edoga. *B.A., Columbia, 1967; M.D., 1971*
E. Bruce Hallett. *M.D., Rochester, 1946*
Edward R. McLean. *M.D., Columbia, 1973*
Ghassem Niknejad. *M.D., Tehran, 1961*
Eugene Watkins. *M.D., Harvard, 1943*
Warren Widmann. *M.D., Yale, 1961*

INSTRUCTORS IN CLINICAL SURGERY
Carey Dolgin, M.D.
Hughes Dougan, M.D.
R. Alan Henseler, M.D.

At Overlook Hospital

Clinical Professor

Richard W. Brenner. *B.A., Princeton, 1954; M.D., Columbia, 1958*

Associate Clinical Professors

David Befeler. *B.A., Columbia, 1955; M.D., 1959*
Bruce J. Brener. *B.A., Yale, 1962; M.D., Harvard, 1966*
Robert Specht. *B.A., Princeton, 1944; M.D., Columbia, 1946*
Charles J. Wittmann, Jr. *B.A., Princeton, 1958; M.D., Pennsylvania, 1962*

Assistant Clinical Professors

John H. Cooper. *B.S., Lawrence, 1947; M.B.A., Chicago, 1949; M.D., 1954*
Douglas M. Costabile. *B.A., Muhlenberg, 1946; M.D., Geneva, 1951*
John Joseph Hudock. *B.S., Northwestern, 1944; M.D., 1948*
Jerrold S. Lozner. *B.A., Columbia, 1967; M.D., Louisville, 1971*
Daniel L. Moore. *M.D., Johns Hopkins, 1958*

ASSOCIATES IN CLINICAL SURGERY
Joseph V. Bocchino, M.D.
Robert E. Knapp, M.D.
Thomas Logio, M.D.
Charles Loguda, M.D.
Saverio J. Panzarino, M.D.
Morton Perkoff, M.D.
Jerome Spivack, M.D.

At St. Luke's–Roosevelt Hospital Center

Professors of Clinical Surgery

Richard B. Stark. *B.A., Stanford, 1936; M.D., Cornell, 1941*
Walter Wichern. *B.S., Mount Union, 1942; M.D., Harvard, 1945*

Clinical Professor

W. Graham Knox. *B.A., Columbia, 1939; M.D., 1942*

Associate Professor

John G. Kral. *M.A., Goteberg (Sweden), 1961; M.D., 1967; Ph.D., 1976*

Associate Professor of Microbiology

George A. Hashim. *Ph.D., Columbia, 1967*

Associate Clinical Professors

Richard G. Eaton. *B.S., Franklin and Marshall, 1951; M.D., Pennsylvania, 1955*
John E. Hutchinson. *B.S., Moorehouse, 1953; M.D., Meharry, 1957*
Robert E. McCabe. *B.A., Williams, 1948; M.D., Cornell, 1953*
Robert E. Miller. *B.A., New York University, 1953; M.D., State University of New York (Downstate), 1957*
Howard R. Nay. *B.A., Virginia Military Institute, 1952; M.D., Columbia, 1956*
James B. Rodgers. *B.A., Virginia, 1944; M.D., 1948*
Edward G. Stanley-Brown. *M.D., Pennslyvania, 1948*

Assistant Professor of Clinical Surgery

William G. Ramey. *B.A., Virginia, 1970; M.D., 1973*

Assistant Clinical Professors

Peter A. Bossart. *B.A., Muhlenberg, 1947; M.D., Cornell, 1951*
Thomas Dailey. *B.A., Princeton, 1957; M.D., Cornell, 1961*
Clayton R. DeHaan. *B.S., Florida, 1949; M.D., Columbia, 1953*
Paul D. Harris. *B.A., Princeton, 1954; M.D., Columbia, 1958*

Conrad G. Lattes. *B.S., Swarthmore, 1958; M.D., Columbia, 1963*
James A. MacDonald. *B.A., Princeton, 1948; M.D., Columbia, 1950*
Haroutane A. Mekhjian. *B.S., American (Beirut), 1961; M.D., 1965*
Robert J. Mulcare. *B.A., Princeton, 1957; M.D., Columbia, 1961*
James H. Terry, Jr. *B.S., Arizona, 1949; M.D., Columbia, 1953*
Chin Bor Yeoh. *B.A., Yale, 1953; M.D., Harvard, 1957*

INSTRUCTORS IN CLINICAL SURGERY
Arnold H. Belgraier, M.D.
Charles R. Blair, M.D.
Gregory W. Brabbee, M.D.
Peter B. Cinelli, M.D.
Hiram Sedwick Cody III, M.D.
Clarence A. Dunn, Jr., M.D.
Peter B. Fodor, M.D.
Stephen Z. Glickel, M.D.
Philip E. Gordon, M.D.
B. Smith Hopkins, M.D.

INSTRUCTORS *(continued)*
Richard H. Karpinski, M.D.
John J. Keyser, M.D.
Farid J. Khoury, M.D.
Dianne R. Lorieo, M.D.
Stephen G. Lynn, M.D.
Richard A. Marks, M.D.
Eric D. Moore, M.D.
Alexander J. Swistel, M.D.
Paul I. Tomljanovich, M.D.
Hiroshi Washio, M.D.
George J. Zambetti, Jr., M.D.

Urology

John K. Lattimer Professor and Chairman

Carl A. Olsson. *B.A., Bowdoin, 1959; M.D., Boston, 1963*

At Presbyterian Hospital

Professor of Clinical Urology

Ralph J. Veenema. *B.A., Calvin, 1952; M.D., Jefferson, 1945*

Associate Professor

Jerry G. Blaivas. *B.A., Tufts, 1964; M.D., 1968*

Associate Professors of Clinical Urology

Terry W. Hensle. *B.S., Pennsylvania, 1964; M.D., Cornell, 1968*
Peter J. Puchner. *B.A., Carleton, 1958; M.D., Columbia, 1962*

Associate Clinical Professors

Stanley B. Braham. *B.A., Columbia, 1944; M.D., 1947*
Frank W. Longo. *B.S., Maryland, 1951; M.D., 1955*
Myron S. Roberts. *B.A., Syracuse, 1950; M.D., State University of New York (Upstate), 1954*

Assistant Professors

Mitchell Clark Benson. *B.S., Union, 1973; M.D., Columbia, 1977*
Harris M. Nagler. *B.S., Union (Schenectady), 1971; M.D., Temple, 1975*

Assistant Professor of Clinical Urology

John D. Birkoff. *B.A., Harvard, 1964; M.D., Columbia, 1969*

Assistant Clinical Professors

Peter N. De Sanctis. *B.A., New York University, 1952; M.D., Boston, 1962*
J. Timothy Donovan. *M.D., New York Medical College, 1948*
John P. Grant. *B.A., Amherst, 1954; M.D., Columbia, 1962*
Thor Steven Sawczuk. *B.A., New York University, 1974; M.D., Medical College of Pennsylvania, 1979*
Michael H. Wechsler. *B.S., Trinity (Connecticut), 1961; M.D., St. Louis, 1965*

ASSOCIATES IN CLINICAL UROLOGY
Leonard J. Rudin, M.D.
Charles E. Umhey, Jr., M.D.

INSTRUCTORS IN CLINICAL UROLOGY
Kevin E. Burbige, M.D.
Richard Kroll, M.D.

At Mary Imogene Bassett Hospital

INSTRUCTOR IN CLINICAL UROLOGY
Bruce MacDonald, M.D.

At Overlook Hospital

Assistant Clinical Professor

Robert R. White. *B.A., Amherst, 1949; M.D., Rochester, 1954*

ASSOCIATES IN CLINICAL UROLOGY
Kenneth L. Day, M.D.
Pascal A. Pironti, M.D.
Joseph S. Ritter, M.D.
Morey Wosnitzer, M.D.

At St. Luke's–Roosevelt Hospital Center

Associate Professor of Clinical Urology

Nicholas A. Romas. *B.A., Colgate, 1958; M.D., Columbia, 1962*

Associate Clinical Professor

Joseph N. Ward. *M.B., B.Ch., University College (Dublin), 1949*

Assistant Clinical Professors

Franklin Charles Lowe. *B.A., Princeton, 1975; M.D., M.P.H., Columbia, 1979*
William J. Nelson. *B.A., Williams, 1945; M.D., New York Medical College, 1946*
Robert D. Wickham. *B.A., Drew, 1947; M.D., Albany Medical College, 1952*

Associate Research Scientist

Daniel J. Hryb. *Ph.D., City University of New York, 1972*

ASSOCIATES IN CLINICAL UROLOGY
William Reed Pitts, Jr., M.D.
Arumbi P. Subramaniam, M.D.

INSTRUCTORS IN CLINICAL UROLOGY
Waleed G. Maloof, M.D.
Alexander Sotiropoulos, M.D.
James W. Vastola, M.D.

Centers and Institutes

Most faculty in Centers and Institutes have Departmental appointments and are listed under these Department headings, with center or institute affiliation in parentheses after their names. Faculty listed here are those who hold appointments only in centers and institutes.

Institute for Cancer Research

Associate Research Scientist

Vladimir Axelrod. *Ph.D., Institute of Molecular Biology (Moscow), 1968*

Center for the Study of Society and Medicine

Research Scholar

Sheila Rothman. *B.S., Simmons, 1960; M.S.W., 1963*

Associate Research Scholar

Sue M. Halpern. *B.A., Yale, 1977; D.Phil., Oxford, 1985*

International Institute for the Study of Human Reproduction

Associate Research Scientists

James M. Allman. *B.A., Rutgers, 1965; M.S., Harvard, 1972; Ph.D., 1973*
Donald J. Lauro. *B.A., California (Berkeley), 1966; M.A., 1971; Ph.D., Australian National, 1979*
Elbert Lewis Mules. *N.S., Tennessee State, 1974; M.S., 1976; Ph.D., Arizona, 1979*
Weng Kong Sung. *D.V.M., Taiwan Provincial Agricultural Institute, 1961; Ph.D., Hokkaido (Sapporo), 1976*
Eugene Martin Weiss. *B.A., California (Berkeley), 1963; M.P.H., 1965; Ph.D., Michigan, 1972*

Institute of Human Nutrition

Assistant Professor of Clinical Nutrition

Robin Marks Kaufman. *B.S., Cornell, 1976; M.S., Tufts, 1979; Ph.D., 1981*

Associate Research Scientist

Susan Kahn Fried. *B.A., Columbia, 1974; M.S., 1975; Ph.D., 1980*

Sergievsky Center

Associate Research Scientists

Ram Kairam. *P.P.C., W.G.B. College (India), 1964; M.B.B.S., Andhra Medical College, 1970*
Richard Neugebauer. *B.A., Chicago, 1965; M.A., Columbia, 1968; Ph.D., 1976; M.P.H., 1979*
Stephen E. C. Ng. *M.D., Hong Kong, 1972*
Jennifer Anne Pinto. *B.A., Stanford, 1978; M.Ph., California (Berkeley), 1982; Ph.D., 1985*
Barbara R. Strobino. *B.A., Syracuse, 1971; M.P.H., Pittsburgh, 1972; M.Phil., Columbia, 1977; Ph.D., 1979*

Student Rosters: Classes of 1987–1990

Class of 1987

Adams, William G.
Adler, Sidney J.
Ahn, Jeffrey Min
Andersen, William
Andreasson, Katrin I.
Atlas, Steven J.
Bacon, Charles K.
Balmaceda, Casilda
Bell, Myron
Benjamin, Ivor
Benton, Anne
Bethel, Colin A.
Bichell, Davod
Binderow, Sander R.
Bingham, Peter M.
Blackwell, Keith
Bond, Sheila Sweeney
Bowe, Barbara
Brzustowicz, Linda
Burd, Randall
Butler, Marilyn W.
Buyske, Jo
Carter, Judy A.
Cataquet, David
Chang, Mark W.
Chess, Mitchell A.
Chien, Ann M.
Cohen, Deborah Li
Colon, Francisco G.
Constantindes, Minas
Cooke, Lawrence
Cosman, Bard C.
Curran, Peter G.
D'Amico, Thomas
Davison, Henry Jr.
Dawson, Scott C.
DellAngelo, Robert
Dickstein, Marc L.
Diefenbach, Pamela
Dominguez, Kenneth
Dorman, Michael A.
Edelstein, Patti M.
Erdmann, Anthony C.
Fairbanks, Mary E.
Figueredo, Vincent M.
Fine, Robert B.
Flood, Mary Theresa
Forese, Laura Lee
Fox, Donald
Fuller, Jonathan E.
Gazetas, Polyxene
Ginsberg, Anne
Goldstoff, Michael
Goodwin, Meredith
Graff, Steven Neal
Green, Andrew
Grimm, Cordelia
Guidera, Steven A.
Hahn, Chiwon
Hedberg, Viking A.
Ho, Kevin
Hoe, Robin Kim
Hohl, William M.
Horwitz, Mara Jean
Hudak, Craig M.
Iqbal, Asjad
Jacobson, Mercedes
Jaile, Jesus C.
Jeffers, Jasmine G.
Joseph, Kimberly T.
Kaplan, Andrew S.
Kazim, Robert
Kelly, Katherine J.
Kim, Steve Ho-Suk
Klein, Jeffrey D.
Krauss, William E.
Kurth, Rebecca Jane
Lane, Mariellen
Laufer, Terri M.
Lee, Thomas H.
Lennon, Paul
Levine, Daniel
Lewtas, Joanne L.
Loiselle, John M.
Lovett, James E.
Luban, Jeremy
Lynch, Julia A.
MacArthur, Solange
Mann, Michael A.
Markowitz, Marian P.
Maxcy, Jeffrey L.
Mayer, Elizabeth A.
Mayer, Pierre V.
Mayor, Manuel R.
McDonagh, Thomas
McGuire, Dawn
Mendez, Beatriz
Michaels, Basil M.
Munier, Michael A.
Muntzner, Ann M.
Nakamura, Glenn E.
Nicolaides, Maria N.
Novins, Douglas K.
Palmer, William S.
Parada, Nereida A.
Peterson, Karen L.
Phillips, Louise A.
Porras, Cornelio J.
Pruitt, Scott K.
Rayhill, Stephen
Rinko, Carol Jean
Roach, Neil A.
Robbins-Myers, Ilana
Rodriguez, Ema Martin
Rodts, Gerald E.
Roelke, Marc
Rosenberg, Michael
Rubin, John A.
Ryan, Michael H.
Sanda, Martin G.
Saxon, James
Schainholz, Daniel
Schierman, Steven W.
Selznick, Hugh S.
Shannon, Kevin M.
Shapiro, Robert E.
Shibutani, Yasushi
Shumway, Joseph B.
Simeon, Daphne
Snook, Curtis P.
St. Clair, Steven H.
Stevens, Peter D.
Stone, Joanne L.
Stormberg, David
Suarez, Sylvia M.
Taylor, Thomas S.
Thal, Gary D.
Thomas, William
Thornhill, Marsha
Torres, Jose A.
Walton, Stacie L.
Weber, Jonathan T.
Weine, Steven M.
Welch, Robert J.
Whang, Ihn Seong
Williams, Nora
Willis, James R.
Wong, Lawrence
Yancopoulos, George
Yin, Way
Young, Gregory J.
Ziarnik, William

Class of 1988

Albert, David
Arnal, Frank
Ascherman, Jeffrey A.
Athanasian, Edward A.
Auwaerter, Paul G.
Bank, David E.
Barre, Lynn
Barth, Konrad N.
Bartlett, Thomas G.
Batchelor, Patricia R.
Blackwood, Mary A.
Blumenfeld, Hal
Bordiuk, John D.
Brown, Lori C.
Bruner, Ann B.
Burgess, Robert J.
Caldarone, Christopher
Calderon, Roberto
Campbell, Scott J.
Cain, Charles F.
Canfield, Stephen M.
Chen, Marie H.M.
Chern, Yu-Dau
Clements, David A.
Codd, Timothy P.
Collum, Robert G.
Condos, Rany
Cooper, Scott E.
Costello, Kevin B.
David, Jonathan
Davidson, James
Dean, Gregory
DeFilippi, Vincent J.
Densel, Donna
Dermksian, Jeffrey V.
Desai, Rajiv D.
Diaz, Aidnag Z.
DiFiore, John W.
Dlugos, Dennis J.
Doctor, David G.
Elliott, John P.
Emy, John K.
Esakof, Darryl D.
Feigin, Andrew S.
Fishman, Marc
Foster, Lawrence G.
Franklin, John R.
Freda, Pamela
Gaiser, Robert R.
Gardner, Barbara E.
Garzon, Maria C.
Gentes, Cynthia I.
Gershon, Perry
Ginsburg, Robin N.
Glazer, Paul A.
Golfinos, John G.
Gordon, Charles F.
Gordon, Jeffrey
Gordon, Kari L.
Gordon, Stuart R.
Griswold, Todd R.
Gruber, Lee
Hall, Simon
Harris, Michael T.
Heimarck, Kaia M.
Higgs, Geoffrey B.
Hines, Michele L.
Ho, Allen
Holsclaw, Douglas
Hoppin, Alison G.
Jelsma, Richard D.
Johnson, Lauren A.
Josephson, Neil C.
Jules, Oswald Jr.
Kanjarpane, Devesh D.
Kannegieter, Lane S.
Karlsson, Troy R.
Katz, Barri L.
Klainer, Peter S.
Kumasaka, Kenneth H.
Kutlu, Hakan M.
Lawrence, Peter
Lee, Young G.
Leibert, Eric M.
Levine, Deborah S.
Levine, Glenn N.
Lewis, Stuart D.
Lietman, Thomas M.
Ling, Edgar H.
Liu, Grant T.
Livingston, Wendy E.
Louie, William
Lovelle, Susan E.
Lustgarten, Jonathan
Malone, Sharon D.
Mandry, Rocio D.
Markert, James M.
Markowitz, Gary D.
Markush, Susan
Mastrobattista, John
McDermott, Janette H.
McLarty, Allison J.
Merkatz, Kenneth A.
Metz, Thomas H.
Mintz, Douglas N.
Moffat, Leslie F.
Monk, Rebecca D.
Muccini, Joseph A. Jr.
Napoli, Joseph
Neff, Taylor E.
Newsam, Margaret A.
Odrich, Steven A.
Palmer, Diana A.
Panarites, Helen C.
Parker, Richard A.
Piscatelli, Sandra J.
Plevy, Scott E.
Pomeranz, Howard D.
Powers, Kenneth J.
Poynor, Elizabeth A.
Price, Douglas E.
Quinn, James M.
Reed, Elizabeth
Resnick, Ronald B.
Rivas, Maria D.
Rodriguez, Leonardo R.
Roth, Gerald M.
Rubenstein, Louis J.
Rubin, Mark S.
Ruenes, Albert
Santiago, Derek W.
Scheff, Ronald J.
Schiller, Henry J.
Schluntz, Kurt C.
Schneider, Julie A.
Scott, Randolph P.
Shinar, Andrew A.
Siegel, Mark D.
Small, Elizabeth A.
Soler, Maria
Sorenson, Joan F.
Soutter, Alexander
Spencer, James
Spitz, Joel L.
Tashima, Karen T.
Tasker, Sybil A.
Tattelbaum, Adam G.
Thomas, Jeffrey E.
Tubbs, Helen K.
Wilson, Geoffrey M.
Wood, Diana N.
Zimmerman, Gail B.
Zornberg, Gwen L.

Class of 1989

Adams, William D.
Armstrong, Anne H.
Attia, Alan L.
Ayars, Natalie M.
Baker, Christopher J.
Baker, Elizabeth A.
Bartels, Matthew N.
Bashford, Michael T.
Basner, Adam L.
Berlow, Rustin R.
Blake, Emily J.
Blake, Robert B.
Bochsler, James J.
Bogardus, Sidney T.
Braunstein, Richard E.
Bridges, Ann C.
Brown, David F.
Buck, Lorraine M.
Buffaloe, Adrienne R.
Burns, Paul G.
Burnstein, Penina
Bushin, Kwane G.
Cahill, James W.
Cerpa, Robert K.
Cha, Imoak B.
Chao, Cynthia T.
Chase, Ronald M.
Chen, Janet
Chen, Shi-Yin
Chou, Calvin L.
Chow, Matthew S.
Civantos, Joseph M.
Coulton, Tanya-Sue D.
Crook, Errol D.
Cukier, Andrew R.
Curll, Bruce
Dailey, Andrew T.
Dedyo, Tanya A.
DeLara, Francisco A.
Denmeade, Samuel R.
Doniguian, Ann E.
Dowling, Michael M.
Doyle, Thomas A.
Drucker, Beverly J.
Dryer, Joseph W.
Dwyer, Bernadette A.
Edelman, Jeffrey D.
Flanzman, Ellen S.
Fleishman, Matthew
Fox, John A.
Garabedian, Vic
Garza, Daniel
Gies, Marjorie S.
Glenn, Martha J.
Goldfarb, Lisa M.
Goldstein, Andrew H.
Gollob, Jared A.
Gonzalaez, Rachael E.
Gordon, Lawrence J.
Gouras, Gunnar K.
Graham, Joy S.
Harrison, Seth L.
Hasapes, Joseph P.
Hellman, Judith
Hirose, Ryutaro
Hirschhorn, Mark K.
Hoover, Craig A.
Huang, Charles
Huang, Laurence
Huang, Paul
Hyman, Edward D.
Infosino, Andrew J.
Jackson, Linda C.
Jamrich, Eric R.
Jean-Claude, Jessie M.
Kaplan, Jeffrey D.
Kennedy, William A.
Kent, Jeffrey D.
Khilkin, Helen
Khuri, Fadlo R.
Korstanje, Kathryn S.
Kuschner, Ware G.
Larson, Cecilia A.
Lautin, Jeffrey L.
Lawson, Charles A.
Lazar, Eric L.
Linwood, Stacy M.
Lopez, John L.
Lopez, Ropberto R.
Lovich, Susan K.
Luby, Robert J.
Madey, Steven M.
Marion, James F.
McCarthy, Denise M.
McDowell, David M.
McGrory, Brian J.
Mele, Joseph P.
Meyer, B. Cristoph
Miller, Robert S.
Montgomery, Mark T.
Nathan, Lauren L.
Negron, Robert A.
Nuzzi, Maria
Oskoui, Ramin
Owens, John M.
Paccione, Jeffrey C.
Peeper, Earl Q.
Pianim, Nana A.
Presto, Joseph G.
Proshan, Steven G.
Raymond, John F.
Rho, David S.
Richards, Joanne M.
Roberge, Anne E.
Rutkove, Seward B.
Sawtelle, Anna K.
Schnellbaecher, Matthew
Schwartz, Ellen R.
Sheikh-Oleslamzadeh, Babak
Shibutani, Hiroshi C.
Shih, Scott Ta-Fei
Siegel, Susan B.
Skaggs, David L.
Smith, Angela Lantz
Smith, David R.
Smith, Randall W.
Smith, Robert C.
Specthrie, Leon K.
Stanislaus, John G.
Sterling, Timothy R.
Szabo, James J.
Terdiman, Jonathan P.
Thomas, Abraham
Thomas, Ann R.
Ton, Martin V.
Toolan, Brian C.
Vaughan, Susan C.
Velasquez, Juan A.
Villanueva, Wayne G.
Wapner, Francis J.
Waring, Amy F.
Warner, Judith E.
Wassynger, William W.
Watkins, James F.
Wertheim, Iris
Wharton, Ronald H.
Zalduondo, Fernando M.

Class of 1990

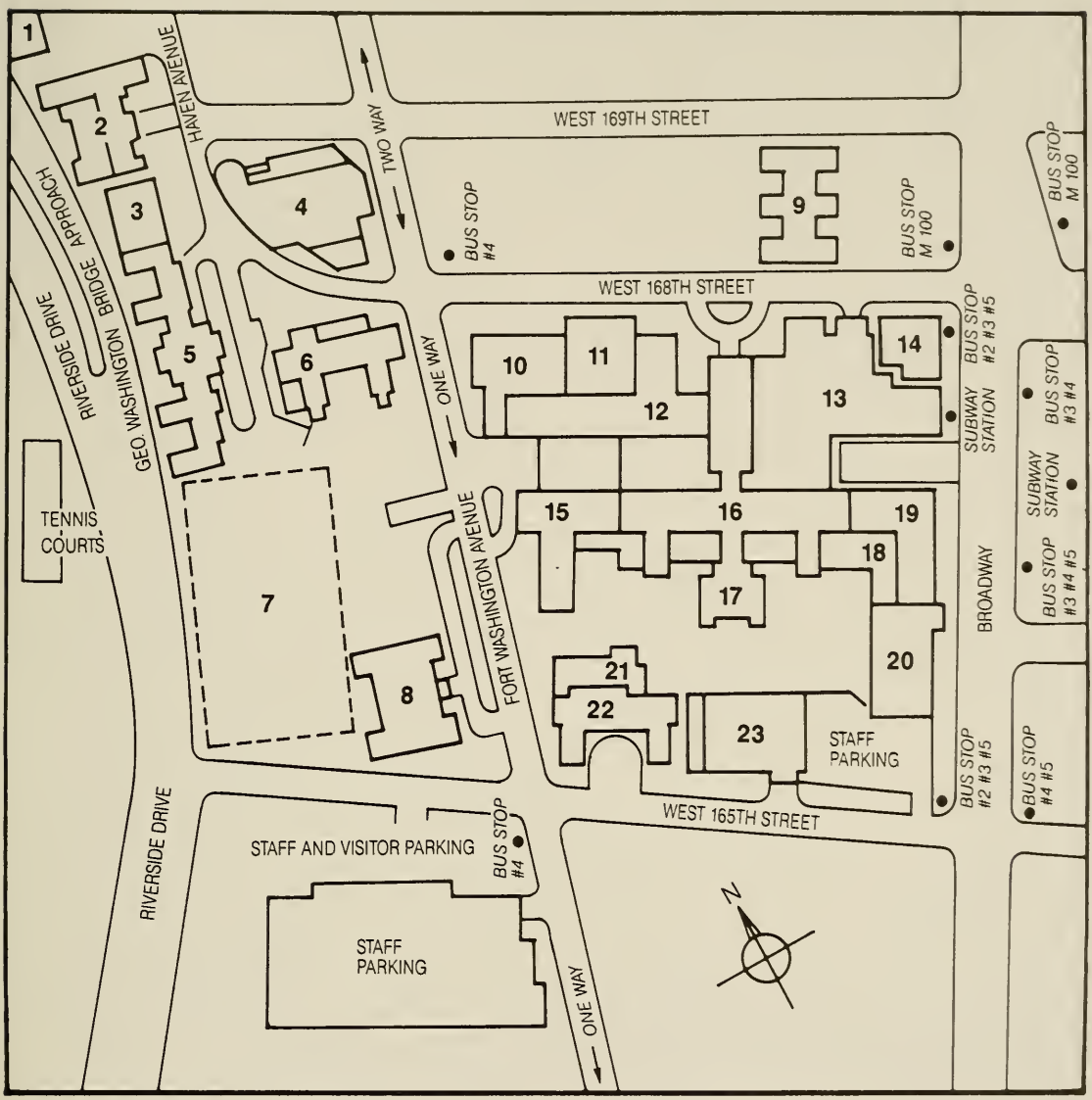
Andelman, Ross B.
Archer, Jonathan M.
Arlein, Wes J.
Artandi, Steven E.
Bank, Michael J.
Beauvais, Paul J.
Beiser, Andrea B.
Belcher, Sally J.
Benarroch, Rosy E.
Beniaminovitz, Ainat
Benson, Carolyn M.
Berkowitz, Cynthia B.
Berkowitz, Noah
Bingham, Clifton O.
Bini, Stefano A.
Biro, David E.
Brahm, Bernard D.
Brown, Lance F.
Bruce-Robertson, Lawrence
Cardwell, Dawn M.
Carls, Alexa N.
Carnazza, Carolyn M.
Chae, Claudia U.
Chan, Germaine Z.
Chen, Enn-Ling
Chess, Andrew J.
Chuck, Roy S. H.
Cirisano, Frank D.
Cohen, Alisa
Collins, Eric D.
Comeau, Dorothy E.
Conner, Shannon E.
Cooper, Elizabeth E.
Costello, Gabrielle J.
Coudreaut, Michael F.
Cross, John S.
Dalton, Joseph M.
Davern, Timothy J.
Davy, Andrew M.
Dove, Lorna M.
Erkan, Muge M.
Feliciano, Melvyn A.
Fisch, Steven L.
Flood, Pamela D.
Fojt, David
Font, David E.
Frawley, Gail E.
Friday, Janet H.
Georgsson, Maria
Gersten, Gregory D.
Givelbar, Rachel J.
Goldstein, Stuart L.
Gordon, Kenneth B.
Gottschalk, Christopher
Granowitz, Craig B.
Green, Ronald J.
Hauan, Michael J.
Hecht, Robert M.
Heller, Stephen J.
Henline, Donald W.
Herbert, Martha R.
Herman, Martin J.
Hirsch, Jeffrey A.
Hoff, James G.
Hogarty, Michael D.
Hyman, Joshua E.
Jason, William J.
Jayasankar, Lalita
Jean-Charles, Arald
Johnson, Christina L.
Johnson, Jeffrey P.
Joseph, Brian K.
Joy, James V.
Kanganis, Polly M.
Kassotis, John
Keating, David P.
Khakoo, Jasmin
Kim, Raymond J.
Kitay, Garry
Klotz, Michael J.
Knox, Robert C.
Kosarek, Francis J.
LeBoutillier, Martin
Lee, Douglas S.
Lee, Lindsay V.
Libutti, Steven K.
Lindeman, Robert P.
Lipsitz, Evan C.
Longobardi, Jennifer L.
Maenza, Janine R.
Mahmud, Faiq
Markowitz, Clyde E.
Mathier, Michael A.
McKay, Mary P.
McKee, Charlotte M.
McMillan, William D.
Mezey, Lillian
Miller, Paul B.
Mirabella, Elizabeth M.
Misra, Vinod K.
Moore, Richard R.
Morelli, Joseph J.
Nash, Laurie C.
Neu, Natalie M.
Nims, Nancy C.
Oppenheim, Monty H.
Parangi, Sareh
Parks, Robert R.
Parry, Samuel I.
Patel, Achyut S.
Pelton, Gregory H.
Phan, See-Chun
Phillips, Michael D.
Post, Wendy S.
Posta, Alan G.
Proctor, Mark R.
Ralston, Steven J.
Rathan, Allison P.
Reese, Whitney E.
Rentzepis, Michael J.
Rosen, Mark A.
Rovno, Hazel D.
Rudkin, George H.
Samitt, Craig E.
Schacter, Leah A.
Schexnayder, Jerry A.
Schneider, Katherine A.
Schwab, Frank J.
Seidenberg, Keith B.
Sharma, Roma
Shneider, Neil A.
Smalls, Arlene J.
Srinivasan, Jayashree
Steinberg, Bryan M.
Stennett, Richard A.
Storniolo, Cosimo N.
Tobin, Matthew S.
Tsao, Hensin
Walczyk, John S.
Warden, William H.
Watkins, Herbert L.
Weisz, James M.
Welner, Dafna
Wider, Todd M.

The Morningside Campus & Environs

3/86

COLUMBIA UNIVERSITY LIBRARIES
0050817833

Columbia-Presbyterian M
Columbia University
HEALTH SCIENCES CAMPUS



1. Bard Haven Apartments
2. Bard Hall Medical Student Residence
3. The Lawrence C. Kolb Research Building
4. Augustus C. Long Library–Armand Hammer Health Sciences Center
5. The New York State Psychiatric Institute
6. The Neurological Institute of New York
7. Site of New Hospital Building
8. The Dana W. Atchley Pavilion
9. School of Nursing (The Georgian)
10. William Black Medical Research Building
11. Alumni Auditorium
12. College of Physicians and Surgeons
13. Vanderbilt Clinic
14. School of Public Health
15. The Harkness Pavilion
16. The Presbyterian Hospital
    New York Orthopedic Hospital
    Squier Urological Clinic
17. The Pauline A. Hartford Memorial Chapel
18. Radiotherapy Center
19. Center for Women and Children, North
20. Center for Women and Children, South
21. Eye Institute Research Laboratories
22. The Edward S. Harkness Eye Institute
23. Service Building